UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

LUCKNOW

Petition No. 1919 / 2022

APPROVAL OF AGGREGATE REVENUE REQUIREMENT (ARR) AND TARIFF FOR FY 2023-24

AND

TRUE-UP OF ARR AND REVENUE FOR FY 2021-22

FOR

Noida Power Company Limited., (NPCL) – (Petition No. – 1919 / 2022)

ORDER UNDER SECTION 62 & 64 OF

THE ELECTRICITY ACT, 2003

May 24, 2023

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UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

Petition No. 1919 / 2022

IN THE MATTER OF:

TRUING UP FOR FY 2021-22, ANNUAL PERFORMANCE REVIEW (APR) FOR FY 2022-23 AND APPROVAL OF AGGREGATE REVENUE REQUIREMENT AND TARIFF FOR FY 2023-24

And

IN THE MATTER OF:

NOIDA POWER COMPANY LTD., GR. NOIDA (NPCL)

ORDER

The Commission having deliberated upon the above Petition and the subsequent filings by the Petitioner, thereafter being admitted on February 28, 2023 and having considered the views / comments / suggestions / objections / representations received from the stakeholders during the course of the above proceedings and also in the Public Hearing held on April 28, 2023 & SAC meeting held on May 08, 2023, in exercise of power vested under Sections 61, 62, 64 and 86 of the Electricity Act, 2003 (hereinafter referred to as 'the Act'), hereby passes this Order.

The Licensee / Petitioner, in accordance with Regulation 5.10 of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution and Transmission) Regulations, 2019, shall publish the Tariff approved by the Commission in at least two (2) English and two (2) Hindi daily newspapers having wide circulation in the area of supply and shall put up the approved Tariff on its internet website.

The Tariff so published shall be in force after seven days from the date of such publication of Tariff and shall, unless amended or revised, continue to be in force for such period as may be stipulated therein. The Commission may issue clarification / corrigendum / addendum to this Order as it deems fit from time to time with the reasons to be recorded in writing.

1 BACKGROUND AND PROCEDURAL HISTORY

1.1 BACKGROUND

1.1.1 The Uttar Pradesh Electricity Regulatory Commission (UPERC) was formed under U.P. Electricity Reforms Act, 1999 by Government of Uttar Pradesh (GoUP) in one of the first steps of reforms and restructuring process of the power sector in the State. Thereafter, in pursuance of the reforms and restructuring process, the erstwhile Uttar Pradesh State Electricity Board (UPSEB) was unbundled into the following three separate entities through the first reforms Transfer Scheme dated January 14, 2000:

- Uttar Pradesh Power Corporation Limited (UPPCL): vested with the function of Transmission and Distribution within the State.
- Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL): vested with the function of Thermal Generation within the State.
- Uttar Pradesh Jal Vidyut Nigam Limited (UPJVNL): vested with the function of Hydro Generation within the State.

1.1.2 M/s Noida Power Company Limited (hereinafter referred to as 'Petitioner' or 'Licensee' or 'NPCL') was granted a electricity license on August 31, 1993 by the State Government under Section 3(1) of the Indian Electricity Act, 1910, which authorized it to supply electricity in the licensed area.

1.2 DISTRIBUTION TARIFF REGULATION

1.2.1 The Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution and Transmission) Regulations, 2019 (hereinafter referred to as "MYT Regulations 2019") were notified on September 23, 2019. These Regulations are applicable for determination of ARR and Tariff from FY 2020-21 to FY 2024-25, unless otherwise extended by the Commission.

PROCEDURAL HISTORY

1.3 BUSINESS PLAN BY THE LICENSEE

1.3.1 The Commission, vide its Business Plan Order dated November 26, 2020 approved the

Business Plan for MYT Control Period (FY 2020-21, to FY 2024-25) for NPCL.

1.3.2 The Commission, vide its Order dated November 22, 2022 approved the Mid Term Review of Business Plan for MYT Control Period (FY 2020-21, to FY 2024-25) for NPCL.

1.4 DETERMINATION OF TARIFF FOR FY 2020-21, ANNUAL PERFORMANCE REVIEW (APR) OF FY 2019-20 AND TRUING UP FY 2018-19

1.5 The Commission, vide its Tariff Order dated December 04, 2020, approved the ARR / Tariff for FY 2020-21, APR for FY 2019-20 and True-Up for FY 2018-19.

1.6 DETERMINATION OF TARIFF FOR FY 2021-22, ANNUAL PERFORMANCE REVIEW (APR) OF FY 2020-21 AND TRUING UP FY 2019-20

1.7 The Commission, vide its Tariff Order dated August 26, 2021, approved the ARR / Tariff for FY 2021-22, APR for FY 2020-21 and True-Up for FY 2019-20.

1.8 DETERMINATION OF TARIFF FOR FY 2022-23, ANNUAL PERFORMANCE REVIEW (APR) OF FY 2021-22 AND TRUING UP FY 2020-21

1.8.1 The Commission, vide its Tariff Order dated July 20, 2022, approved the ARR / Tariff for FY 2022-23, APR for FY 2021-22 and True-Up for FY 2020-21.

1.9 DETERMINATION OF TARIFF FOR FY 2023-24, ANNUAL PERFORMANCE REVIEW (APR) OF FY 2022-23 AND TRUING UP FY 2021-22

1.9.1 As per the provisions of the MYT Regulations, 2019 the Distribution Licensees were required to file their ARR / Tariff Filings before the Commission latest by November 30th of each year so that the tariff can be determined and be made applicable for the subsequent financial year.

1.9.2 The Regulation 4 of MYT Regulations, 2019 stipulates the detailed principles, procedures and timelines for determination of tariff. The relevant extract of the same is reproduced below:

Quote

4. Petitions to be filed in the Control Period

4.1 The Petitions to be filed in the Control Period under these Regulations will comprise of the following:

Filing date	***True- Up***	***APR***	***ARR / Tariff***
15.10.2019	***Business Plan for FY 2020-21 to FY 2024-25***		
30.11.2019	*FY 2018-19 (as per MYT Regulations, 2014) **	*FY 2019-20 (as per MYT Regulations, 2014) **	*FY 2020-21*
30.11.2020	*FY 2019-20 (as per MYT Regulations, 2014) **	*FY 2020-21*	*FY 2021-22*
30.11.2021	*FY 2020-21*	*FY 2021-22*	*FY 2022-23*
30.11.2022	*FY 2021-22*	*FY 2022-23*	*FY 2023-24*
30.11.2023	*FY 2022-23*	*FY 2023-24*	*FY 2024-25*

**The filings shall be as per Multi-Year Distribution Tariff Regulations, 2014 and Multi-Year Transmission Tariff Regulations, 2014, however, filings have to be made on 30th November of the respective year as per these Regulations.*

4.2 The Licensee shall submit the data regarding the above as per Guidelines and Format prescribed and added/ amended from time to time by the Commission.

Unquote

1.9.3 The Petitioner submitted its Petition in the matter of Truing Up for FY 2021-22, Annual Performance Review (APR) for FY 2022-23 and determination of ARR / Tariff for FY 2023-24 before the Commission, on November 30, 2022.

1.10 PRELIMINARY SCRUTINY OF THE PETITIONS

1.10.1 The Commission conducted a preliminary analysis of the ARR Petition filed for FY 2023-24 and raised data gap queries to the Petitioner through Deficiency Notes issued vide letter dated January 06, 2023, e-mail dated January 10, 2023 & February 08, 2023. The Commission in the data gap queries has asked the Petitioner to provide the information related to the reconciliation of power purchase cost with the audited accounts, calculation of arrears claimed under Long Term Power Purchase Agreement (LTPPA) in MS-Excel Format, impact of change in law under LTPPA, calculation of the energy sales booked for the unmetered category under the supply schedule of LMV-5, documentary evidence for DSM charged, reconciliation of component of O&M expenses with audited accounts, calculation of RPO in requisite format, reconciliation of the transmission charges with audited accounts, trading margin paid to traders for power procurement, projects/ schemes wise reconciliation of the actual capital expenditure with the approved capital capex, basis for calculation of consumer contribution, roadmap to meet the proposed revenue gap and other related matters to determine the ARR/Tariff for FY 2023-24.

1.10.2 The Licensee submitted their response to the first and second Data Deficiency on February 06, 2023. The Technical Validation Session (TVS) was conducted on February 16, 2023, which was attended by the senior officials of the Commission and the Licensee and during the TVS, the Licensee explained various issues raised in the deficiencies. Subsequently, minutes of meeting (M.O.M) along with pending data / information were issued and the Licensee was directed to submit the information within 10 days vide email dated February 17, 2023.

1.11 ADMITTANCE OF THE TRUE-UP, APR AND ARR / TARIFF FILINGS

1.11.1 The Commission also reiterated in the Admittance Order dated February 28, 2023 (annexed as **Annexure-1** of this Tariff Order), directed the Petitioner to publish a Public Notice within three working days of issue of this Admittance Order, consisting of the summary and highlights of the proposed Aggregate Revenue Requirement and Tariff for FY 2023-24, Annual Performance Review for FY 2022-23 and True-Up for FY 2021-22 in at least two (2) English and two (2) Hindi daily newspapers having wide circulation in its licence area, inviting suggestions and objections within 15 days from the date of publication of the Public Notice(s) from the stakeholders and public at large. The Petitioner shall also upload on its website the Public Notice, Petitions filed before the Commission along with all regulatory filings, information, particulars and related documents in their original version (not in zipped or compress folder), which shall be signed digitally and in searchable pdf formats along with all Excel files and as per any other provision of the Regulations and Order of the Commission. The Petitioner shall also ensure that those files are broken into such size which can be easily downloaded. The Petitioners shall also ensure that for downloading the same, there is no requirement of providing personal information.

1.11.2 The Commission also directed that the Public Notice(s) should also contain the details of the cumulative revenue gap and its treatment, Distribution & Transmission losses, average power purchase cost, Average Cost of Supply, average retail Tariff realised from each category / sub-category of consumers, wheeling charges, transmission charges, open access related charges, subsidy by GoUP etc.

1.11.3 The Commission also directed that the Public Notices should also indicate that the stakeholders should regularly check the websites of the Petitioners for further submissions made in respect to these proceedings. The Petitioners shall also submit a set of notices along with the copies of original newspapers.

1.11.4 Further, the Commission raised several deficiencies subsequent to the issuance of admittance order to which replies have been received from the Petitioners which has also been taken into consideration.

1.12 PUBLICITY OF THE LICENSEE FILING

1.12.1 The Public Notice(s) detailing the salient features of the Filings were published by the Licensee in daily newspapers as detailed below, inviting objections from the public at large and all stakeholders.

1.12.2 This information appeared in Hindi Newspapers (Dainik Jagran, Navbharat Times) and English Newspapers (The Statesman, Times of India) on March 03, 2023.

1.13 STATE ADVISORY COMMITTEE MEETING

1.13.1 The State Advisory Committee (SAC) meeting was also conducted on May 08, 2023 wherein the views and suggestions of the members of the SAC were sought. The same have also been taken into consideration while determining and finalising the ARR and Tariff.

2 PUBLIC HEARING PROCESS

2.1 PUBLIC HEARING

2.1.1 To provide an opportunity to all sections of the population in the State to express their views and to also obtain feedback from them, public hearings were held by the Commission. The public hearings were conducted as per below details:

S. No	Date	Hearing in the matter of
1	April 10, 2023	PuVVNL
2	April 21, 2023	MVVNL, UPPTCL
3	April 27, 2023	DVVNL, KESCo
4	April 28, 2023	NPCL, PVVNL

2.1.2 The Commission in order to have participation and views / comments / suggestions / objections from the public at large and all stakeholders had uploaded the Notice (to be annexed) for Public hearing dated April 10, 2023, April 21, 2023, April 27, 2023 and April 28, 2023 on its website (www.uperc.org) and the same was also published in the following daily newspapers:

Newspaper	Date of Publication
Amar Ujala (Hindi) UP Edition	March 28, 2023
The Times of India (English) Lucknow Edition	March 28, 2023
Dainik Jagran (Hindi) UP Edition	March 28, 2023
Hindustan Times (English) Delhi Edition	March 28, 2023

2.1.3 Consumer representatives, industry associations as well as several individual consumers participated actively in the public hearing process.

2.1.4 The State Advisory Committee meeting was held on May 08, 2023 in which ARR and Tariff related issues were discussed and inputs were sought from the members of the Committee. The same have also been taken into consideration while finalising and determining the ARR and Tariff.

2.1.5 The views / suggestions / comments / objections / representations on the True-up / APR / ARR / Tariff submissions received from the public were forwarded to the petitioners for their comments / response.

2.1.6 Besides this, the Commission, while disposing the True-Up / APR / ARR / Tariff Petition filed by the State Discoms, has also taken into consideration the oral and written views / comments / suggestions / objections / representations received from various stakeholders during the public hearings or through post or by e-mail.

2.1.7 The Commission has taken note of the views and suggestions submitted by the various stakeholders who provided useful feedback on various issues and the Commission appreciates their participation in the entire process.

2.2 VIEWS / COMMENTS / SUGGESTIONS / OBJECTIONS / REPRESENTATION ON TRUE-UP, APR AND ARR / TARIFF FILINGS

2.2.1 The views/ comments / suggestions / objections / representations made by the stakeholders often refer to all the 5 Discoms combined / individually, UPPCL, NPCL, UPPTCL etc. in their submissions while discussing various matters. The objection / comments / suggestions received from the stakeholders after May 02, 2023 have not been taken into consideration.

2.2.2 The Commission has attempted to capture the summary of comments / suggestions / observations in this section. It may be that a few names of stakeholders / public on the attendance list do not appear in this section, however all the issues / matters raised by them relevant to these proceedings have been discussed. In case any comment / suggestion / observation is not specifically elaborated, it does not mean that the same has not been considered. The Commission has considered all the issues raised by the stakeholders and Licensees response on such issues while carrying out the detailed analysis / discussion of the True-Up for FY 2021-22, APR for FY 2022-23 and ARR / Tariff for FY 2023-24. The list of the consumers, who have submitted their views / comments / suggestions / objections / representations, is appended to this Order. The major issues raised therein, the replies given by the Licensees and the views of the Commission have been summarised as detailed below:

LICENSE PERIOD

A. Comments / Suggestions of the Public

2.2.3 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted in the matter of time period of license of NPCL that the matter is subjudice at Hon'ble Supreme Court so it is requested that comments and suggestions be looked into and accounts be scrutinised thoroughly. In case the Apex Court decides to stay judgement of Hon'ble Appellant Tribunal for Electricity (APTEL), it is also requested to provide necessary arrangement by handing over of power distribution to PVVNL as interim measures till Government of Uttar Pradesh decide another Promotor to take over distribution and apply for Distribution License.

B. Petitioner's Response

2.2.4 As regards to the objection of Shri Ravi Sharma the Petitioner submitted with reference to the aforesaid observation that the impugned Order dated November 26,2020 of the Commission is under subjudice at the Hon'ble Supreme Court. Hence, it will not be appropriate judicial prudence to comment in a matter which is subjudice.

C. Commission's View

2.2.5 The matter of License is not part of this proceedings and therefore there is no need to address the comments unless the matter is settled by the Hon'ble Supreme Court. However, the Commission has taken note of the objections/suggestions made by the stakeholder and the Petitioner's response.

A. Comments / Suggestions of the Public

2.2.6 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that the Application of Adani Group is also filed for parallel distribution license, therefore, the capital expenditures can be pruned so that there is no overlap of capital assets in same area of power distribution.

B. Petitioner's Response

2.2.7 As regards to the objection of Shri Ravi Sharma the Petitioner submitted that as an existing Distribution Licensee of Greater Noida Area and in pursuance of various provisions of the MYT Regulations 2019 has submitted its ARR and Tariff Proposal for the kind perusal and approval of the Commission. The Capital Expenditure proposed is to enable the Company to meet its Universal Service Obligation under Sections 42 & 43 of the Electricity Act, 2003.

2.2.8 Further, the Petitioner submitted that it has made Capital Expenditure for FY 2021-22, estimated its Capital Expenditure for FY 2022-23 and projected its Capital Expenditure for FY 2023-24 and has provided detailed justification for Capital Expenditure in relevant Chapters of True-up FY 2021-22, APR FY 2022-23 and ARR FY 2023-24 for the kind perusal and consideration of the Commission.

2.2.9 Moreover, mere filing of any application for parallel distribution license in any area do not excuse the existing Discom/Company to not to fulfil its Universal Service Obligation ("USO") casted under Section 42 and 43 of the Electricity Act, 2003.

C. Commission's View

2.2.10 The above matter is not part of this proceedings and therefore there is no need to address the comments. However, the Commission has taken note of the objections/suggestions made by the stakeholder and the response made by the Petitioner.

TARIFF

A. Comments / Suggestions of the Public

2.2.11 Shri Avadhesh Kumar Verma, Chairman, M/s U.P. Rajya Vidyut Upbhokta Parishad submitted that there is enough Regulatory surplus with NPCL to give 10% Regulatory Discount for 5 years or provide free electricity for 1 year and further requested the Commission to provide free electricity for farmers also.

B. Petitioner's Response

2.2.12 As regards to the objection of Shri Avadhesh Kumar Verma, the Petitioner submitted that Shri A. K. Verma has mistakenly considered the annual revenue / sales / total income of the Company with the revenue surplus.

2.2.13 Further, the Petitioner submitted that it has filed its Petition No. 1919 of 2022 for approval of Annual Revenue Requirement and Tariffs for FY 2023-24, Annual Performance Review for FY 2022-23 and Truing-up for FY 2021-22 for the kind consideration of the Commission and requests the Commission to take an appropriate view with regard to the Tariff to be charged by the Petitioner from the consumers for FY 2023-24.

C. Commission's View

2.2.14 The Commission has taken note of the objections/suggestions made by the stakeholder and the Petitioner's response and has been appropriately dealt with in Tariff Philosophy and Revenue and Revenue Gap/(Surplus) chapters.

A. Comments / Suggestions of the Public

2.2.15 Shri Avadhesh Kumar Verma, Chairman, M/s U.P. Rajya Vidyut Upbhokta Parishad submitted that the NPCL's MD does not meet general public but only meets industrialists, therefore, the Tariff Should not be increased.

B. Petitioner's Response

2.2.16 As regards to the objection of Shri Avadhesh Kumar Verma, the Petitioner submitted that, in compliance to the guidelines of the Commission, it has devised a 3-tier complaint redressal mechanism which is duly published on the backside of the Consumer bill and company's website.

C. Commission's View

2.2.17 The Commission has taken note of the objections/suggestions made by the stakeholder and the Petitioner's response.

POWER PURCHASE

A. Comments / Suggestions of the Public

2.2.18 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that Noida Power Company Limited caused Illegitimate expenses of approx. Rs 3.1 Crore towards the purchase of Power from Exchange through Trader M/s APPCL in spite of self-capable of such purchase of Power and therefore the burden of paying to Power trader shall not be passed on to the consumers.

B. Petitioner's Response

2.2.19 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that the power can be procured from power exchange in the following manners:

I. Through Direct membership

II. Through a licensed trader who is a member of Energy Exchange

2.2.20 Based on the volumes of the company, it has been procuring power from Power exchange from more than 10 years through Licensed Trader competitively and efficiently and the Commission itself has been allowing such procurement of power from last so many years.

2.2.21 The Petitioner stated the benefits accrued while transacting on Power Exchanges through a licensed power trader.

2.2.22 In direct membership, the Company is required to made advance payment corresponding to the bid value to Power Exchange. However, because of trader membership it is paying for the power that too 3-4 days after its delivery.

The relevant clause of PPA is reproduced below:

Quote:

6. Billing and Payment cycle;

APPCPL shall raise obligation reimbursement Bill(s) & Trading Margin bills on or after 9th, 16th, 24th & last day of the month for the units bought by NPCL based on the daily obligation report issued by the power exchange. The payment will be credited to APPCPL *through Electronic Transfer by NPCL designated bank in full within 3 Days from the date of Submission of obligation reimbursement bills by APPCPL through Fax/E-mail to NPCL. In case of bank Holiday, the payment shall be made on next banking/working day*

Unquote:

2.2.23 Further, the Commission in Tariff Order while approving the ARR for FY 2021-22 had approved 12% (Approx.) quantum of total power from Power Exchange. The Company would have to arrange funds for availability of such power from Power exchange(s) on daily basis.

2.2.24 The Petitioner submitted that as a trader member the Company doesn't require to pay various membership fee to Power Exchanges i.e. Admission Fees, Annual Processing & Subscription Fees and Interest Free Security Deposit. In addition to above the Company would require to employ additional round the clock manpower as well for the purpose of submitting bids at various exchanges and scheduling of power which is currently being managed by the trader.

2.2.25 The Petitioner also stated that the trading margin paid by it was Rs.0.03 per kWh which based on the enhanced volumes of power from Power Exchange and on pursuance and negotiation with the licensed trader, the trading margin was revised in October 2021 from Rs. 0.03 per unit to Rs. 0.01 per kWh which is much lesser than the prescribed trading margin of upto Rs. 0.07 per unit by the Central Electricity Regulatory Commission.

2.2.26 The Petitioner in addition to the above also submitted that since 2008 i.e. the time since when the power exchange came into operations, it has been procuring power through Trader and the Commission has been approving the same without any observation / qualification. For the first time, the Commission observed in its Tariff Order dated July 20, 2022 directed to procure power directly from the Power Exchange, however, but by the time FY 2021-22 was over and the Commission direction can only be implemented post July 20, 2022, which has since been implemented.

2.2.27 The Petitioner further stated in compliance to the above, it has taken direct membership of Indian Energy Exchange and Hindustan Power Exchange for the purpose of procurement of power from exchange.

C. Commission's View

2.2.28 The Commission has taken note of the objections/suggestions made by the stakeholder and the Petitioner's response and has been appropriately dealt with in Power purchase chapter.

TRANSMISSION & DISTRIBUTION LOSS

A. Comments / Suggestions of the Public

2.2.29 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted NPCL has not deployed adequate efforts to reduce the losses which is evident from the fact that it inspite of having approx. 70% of HT load wherein 48-50% is at 33kV feeders connected to 132kV and 220kV Substations of UPPTCL directly.

2.2.30 All private Discoms in India including parent Company of NPCL i.e.CESC have shown remarkable improvement in reducing T&D losses, however, NPCL has explained all reasons to increase T&D losses.On BRPL website details of T&D losses and collection efficiency for each division is shown (https://www.bsesdelhi.com/documents/55701/92708/BRPL_AT_and_C_Loss_FY_2021_22.pdf/30ead886-c08e-8ed9-14f7-cdf89fa1114f?t=1673954390714).It is one method that Discom-Public can actually work together to reduce losses.

2.2.31 It is demanded that NPCL provide losses as follows on month on month basis on its website:

Month	April	May…	March
Division 33kV Level Losses			
11kV & LT Losses at Division-1			
11kV & LT Losses at Division-2			
11kV & LT Losses at Division-n			

2.2.32 Shri Ravi Sharma further submitted that NPCL needs to come clean about T&D losses as in the past, lots of energy has been shown to be billed to unmetered rural consumers. In the past Consumer Representatives have raised suspicions about working of NPCL employees and it is submitted that in no circumstances NPCL T&D losses can be more than 5%.

2.2.33 Incorrect utility Practice is appeared in submission of Data for T&D losses by NPCL when compared FY 21-22 ARR petition and FY 23-24 ARR Petition data.

a. Difference in Losses Submitted

	As per FY 23-24 ARR			As per FY 21-22 ARR		
	FY 19-20	FY20-21	FY21-22	FY 19-20	FY20-21	FY21-22
At 33kV	2.43	2.44	2.44	1.14 (audited)	1.18	1.18
At 11kV	6.18	6.05	5.94	3.11	2.97	2.97
At LT	20.63	21.04	20.58	20.63	23.76	21.91
Total	8.23%	8.39%	7.95%	8.23%	8.54%	9.03%

2.2.34 When NPCL has submitted details of increase of 33kV feeders means that actual technical losses should have reduced, however, it has shown such high losses in P1 format for ARR FY 23-24.

2.2.35 A close scrutiny can reveal that filed loss units seems to be in trend but loss in percentage is very high. The right computation are done by us and observed that Discom has used the formula to determine loss percentage is Lost Unit Divided by Sold unit whereas correct one is Lost Unit divided by Unit received at Voltage level.

2.2.36 If it is only an error, then NPCL must seek explanation from its management for filing wrong data on affidavit which is criminal offense to. However, in our submissions the motive of NPCL may be to avail higher losses at 33kV and 11kV to dissuade Open Access also.

B. Petitioner's Response

2.2.37 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that in accordance with Regulation 4 of Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021 it conducts its quarterly energy accounting which includes the T&D losses and also uploads the quarterly report, being submitted to Bureau of Energy Efficiency (BEE) on its website for the access of all Stakeholders.

2.2.38 The Petitioner further states that it already provided the complete details of losses in its Petition No. 1919 dated November 30, 2022. Further, in compliance to the provisions of Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021 as amended the details have also been made part of the Energy Audit Report in its Petition No. 1919 dated November 30, 2022.

2.2.39 The Petitioner submitted that FY 2021-22 when Petition No. 1684/2021 dated February 01, 2021 was filed, the world was facing COVID-19 pandemic and hence, it was highly uncertain to accurately projects, the demand and T & D losses during that time. It has submitted the details how COVID-19 pandemic affected the Loss Control drives in its ARR petition for FY 2021-22 vide Petition No. 1684/2021.Further, on account of national lockdown / curbs on public movement to control the impact of COVID-19 pandemic the Loss Control Drives were restricted. Based on this scenario it has projected its Losses.

2.2.40 The Petitioner further submitted that as the effect of COVID-19 pandemic was reduced considerably during FY 2021-22 therefore, it was able to curtail actual Losses substantially as compared to initial estimate of 9.03%.

2.2.41 The Petitioner also submitted that the objector has inadvertently compared the data which has been submitted at two different points of time and under two different contrasting circumstances, hence, not comparable.

C. Commission's View

2.2.42 The Commission has taken note of the objections/suggestions made by the stakeholder and the Petitioner's response. Further, the Commission has considered the distribution loss for relevant period as per distribution loss trajectory approved in the Business Plan Order and the same has been dealt in Energy Balance and Distribution loss chapter.

A. Comments / Suggestions of the Public

2.2.43 Shri Avadhesh Kumar Verma, Chairman, M/s U.P. Rajya Vidyut Upbhokta Parishad submitted that Noida Power Company Limited in order to evade approval of the Commission has purchased short term power @ Rs. 6.50/kWh, whereas, the approved average PPC was Rs. 4.64/kWh from all sources.

B. Petitioner's Response

2.2.44 As regards to the objection of Shri Avadhesh Kumar Verma, the Petitioner submitted that, in compliance to the directives of the Commission, it has been procuring power from LT, MT and ST sources through competitive bidding with due approval of the Commission. The Petitioner further submitted that it has in its Petition No. 1919 of 2022 has provided a detailed explanation / justification regarding Power Purchase under Short Term for the kind approval of the Commission.

C. Commission's View

2.2.45 The Commission has taken note of the objections/suggestions made by the stakeholder and the response made by the Petitioner & has address in the True-up Chapter in the Power Purchase section of the Tariff Order.

CAPITAL EXPENDITURE

A. Comments / Suggestions of the Public

2.2.46 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that NPCL has been engaged in gold plating of assets and is not adopting transparent procurement process and carrying out capital expenditure which are not necessary for consumer services as can be observed from earlier years in which the Commission has disallowed the luxury cars and expenditure on 132kV and 220kV assets.

B. Petitioner's Response

2.2.47 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that the Commission vide its order dated December 04, 2020 approved the Petition No. 1541/2019 for True-up of FY 2018-19 and ARR for FY 2020-21, wherein it carried disallowances which are not as per the prevailing Regulations and past practices. Aggrieved by the aforesaid order, the Petitioner has filed an appeal bearing no. 98 of 2021 before the Hon'ble APTEL on January 25, 2021 against the above order.

2.2.48 Pending the adjudication of the aforesaid appeal and other appeals relating to the impugned methodology adopted by the Commission for calculation of Closing GFA of FY 2018-19, the Closing GFA of FY 2018-19 and Opening GFA of FY 2019-20 has been computed as per the methodology followed by the Commission in its tariff order dated September 03,2019 with GFA bases as per the submissions for Truing up of ARR for FY 2018-19.

2.2.49 Similarly, the Commission has carried disallowances in subsequent years vide subsequent Tariff Orders latest being that of July 20, 2022. Against these disallowances it has filed various appeals before the Hon'ble APTEL which are still pending. Hence, it will not be appropriate judicial prudence to comment in a matter which is subjudice.

C. Commission's View

2.2.50 The Commission has taken note of the objections/suggestions made by the stakeholder & has appropriately dealt the CAPEX in various sections in Tarff Order.

A. Comments / Suggestions of the Public

2.2.51 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that the NPCL shall carry out the Prudence check related to CAPEX as per following parameters:

- whether a project is required or not.

- whether project is required in current year or in later years.
- whether procurement is done by Open Tendering following Central Vigilance Commission's Guidelines.
- Whether all vendors who have participated in material supply or contracts in other Discoms and who are known for quality products, were allowed to enter into competitive biddings?
- Whether project is completed as per timeline or it is being delayed? According to MYT Regulations 2019 of the Commission is vested not only with powers to scrutinise all the issues but also duty bound to give effect to the prudence check process.

B. Petitioner's Response

2.2.52 As regards to the objection of Shri Ravi Sharma, the Petitioner states that the Commission after prudence check approves its petition of which Capital Expenditure is a part of it concerning ARR, APR and True Up.

2.2.53 The Capital Expenditure proposed is to enable it to meet its Universal Service Obligation under Sections 42 & 43 of the Electricity Act 2003.

2.2.54 The Petitioner submitted that it is part of a well-managed and highly respected RP-SG group and thus, has well-defined systems, policies, procedures and controls - both internal and external and also the Greater Noida Industrial Development Authority (GNIDA) has three Directors on the Board of the Company including the Chairman of its Board and the Company operates under the supervision of its Board of Directors. The Board of the Company has always appointed well-known Audit Firms to regularly carryout internal audits as well as statutory audits of the Company. In addition to the above, the books of accounts are also audited by well-known Cost Auditor the appointment of which is duly approved by the Central Government.

2.2.55 The Petitioner based on above has done Capital Expenditure for FY 2021-22, estimated its Capital Expenditure for FY 2022-23 and projected its Capital Expenditure for FY 2023-24. Further it has provided detailed justification for Capital Expenditure in its Petition chapters.

C. Commission's View

2.2.56 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. The CAPEX for Licensee for FY 2023-24 is considered as per MYT Regulations, 2019 in Chapter-6 of this Order. Further, the Commission will allow CAPEX while carrying out True-Up of relevant year after prudence check in accordance with the MYT Regulations, 2019.

A. Comments / Suggestions of the Public

2.2.57 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted a case of Gold Plating in which GI poles purchased by NPCL at much higher rates of normal MS poles.

2.2.58 The depreciation and O&M are fixed as per Regulations on general assumption of poles which are made of MS and not GI. Age of GI pole is atleast 30-40% higher and there is no requirement of poles etc, means much lesser need of O&M expense. However, with GI poles, consumer tariff is first impacted due to Capex and then due to higher O&M and higher depreciation, whereas in actual it should be lesser O&M and lesser depreciation.

B. Petitioner's Response

2.2.59 As regards to the objection of Shri Ravi Sharma, the Petitioner states that usage of GI poles in the network development has variety of benefits some of which are enlisted below-

a. Higher Longevity and durability reducing the need of frequent replacement/ breakdown. Due to the increased strength, chances of accidents due to breaking of poles with time / any accident gets reduced and it is pertinent to mention that due to higher longevity and durability the outages/ shutdowns taken to replace the poles also gets reduced for the overall benefit of the consumers only.

b. Usage of GI pole also reduces the need for frequent shut downs for the painting of poles which improves the supply reliability and reduces interruptions.

2.2.60 The Petitioner submitted that it has been procuring best of the quality material through the transparent process of bidding. Due to the above, it is able to maintain its system efficiently.

2.2.61 The Petitioner further submitted that due to its operational and consumer servicing performance, it has been awarded 7th Rank in the 11th Annual Integrated Power Rating Report conducted by Power Finance Corporation Ltd. Under Ministry of Power and secured the Highest “A+” rating. Also, the Company has secured “A” rating which is also amongst the highest in the 2nd Consumer Service Rating of Discoms conducted by Rural Electrification Corporation under the Ministry of Power.

C. Commission’s View

2.2.62 The Commission has taken note of the objections/suggestions made by the stakeholder.

A. Comments / Suggestions of the Public

2.2.63 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that in the cost data book, 11-meter STP is considered at rate of Rs. 15,049/- even for 33kV lines, still if presumed that 12 mtr pole is purchased by Discom the rate shall not be more than Rs. 17,000/- per pole. However, 12-meter STP is purchase & installed with GI by Discom at rates of Rs. 38,298/- Considering installation cost of Rs. 3000/-, average purchase cost (as derived from FAR submitted by NPCL) is Rs. 35,298/- almost double of cost data book.

B. Petitioner’s Response

2.2.64 As regards to the objection of Shri Ravi Sharma, the Petitioner states that it is required to establish an efficient distribution network for providing 24x7 power supply to its consumers as per their demand and cost of each and every asset is capitalized in the Fixed Assets Register (FAR). This activity is totally different than the recovery of cost from consumers as “Consumer Contribution” for providing new service connections as per the Cost Data Book, hence not comparable.

2.2.65 The Fixed Asset Register is created in accordance with the actual work executed as per the Work Orders issued and material consumed from time to time for the purpose of providing service which may be to one single consumer or many consumers altogether. Hence, the cost so capitalized against one asset, comprises various other materials and labour cost (used in execution of the entire job) which cannot be compared with “Charges” as per Cost Data Book being recovered from the consumers.

2.2.66 Further, the Cost Data Book-2019 does not provide any cost for 12 mtr/13 mtr STP Pole.

C. Commission’s View

2.2.67 The Commission has taken note of the objections/suggestions made by the stakeholder.’

A. Comments / Suggestions of the Public

2.2.68 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) revealed a Case of Excessive Cost in FAR and stated that since the Commission had disallowed approx. 25% of capex of NPCL in previous Orders, NPCL has made provision under FAR for 25% over-accounting /inflated costing of assets. Since all items cannot be researched so quickly, only few items are analysed. Even in IT hardware, NPCL is able to over book from 25% to 50% of actual cost and demand a CAPEX committee be formed to look into their capex deeply to prevent any undue expenses passed on to consumers.

B. Petitioner’s Response

2.2.69 As regards to the objection of Shri Ravi Sharma, the Petitioner states that the Capital Expenditure proposed is to enable it to meet its Universal Service Obligation under Sections 42 & 43 of the Electricity Act, 2003. It is part of a well-managed and highly respected RP-SG group and thus, has well-defined systems, policies, procedures and controls - both internal and external also the Greater Noida Industrial Development Authority (GNIDA) has three Directors on the Board of the Company including the Chairman of its Board and the Company operates under the supervision of its Board of Directors. The Board of the Company has always appointed well-known Audit Firms to regularly carryout internal audits as well as statutory audits of the Company. In addition to the above, the books of accounts are also audited by well-known Cost Auditor the appointment of which is duly approved by the Central Government.

2.2.70 The Petitioner in reference to the capitalisation land, Substation and associated costs submitted that the Commission vide its various Tariff orders recent being order July 20, 2022 approved its Petition No. 1797 / 2021 for True-up of FY 2020-21 and ARR for FY 2022-23, wherein it carried disallowances which are not as per the prevailing Regulations and past practices. Aggrieved by the aforesaid order, it has filed an Appeal bearing No. 398 of 2022 before the Hon'ble APTEL on September 12, 2022 against the above order which is still pending.

C. Commission's View

2.2.71 The Commission has taken note of the objections/suggestions made by the stakeholder.

A. Comments / Suggestions of the Public

2.2.72 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted the comment related to file name 35 Annexure-15(B) CAPEX for project below Rs. 10/- Crore for FY 2023-24 wherein Annexure 10 B: Proposed Capital Expenditure of projects of value not exceeding Rs. 10 Crore for FY 2023-24 in which at serial number A1aiii provided that CAPEX of Rs. 20/- Crore is to be carried out for providing electricity connection of 4 nos. of 33 kV consumers. Whereas NPCL has not provided any kind of Annexure to justify this kind of huge cost of Rs. 5/- Crore per consumer. Hearsay is that NPCL provide estimates without approved rates of Commission and it is therefore become necessary for scrutiny of such cases and it is requested that this item be shifted to CAPEX more than Rs. 10/- Crore so that proposal be approved by the Commission.

B. Petitioner's Response

2.2.73 As regards to the objection of Shri Ravi Sharma, the Petitioner states the Capital Expenditure proposed is to enable it to meet its Universal Service Obligation under Sections 42 & 43 of the Electricity Act 2003 and accordingly 33 kV large consumers are also to be serviced further the said CAPEX of Rs. 20/- Crore will be fully funded by the consumers and accordingly, the entire amount of Rs. 20/- Crore have been considered in consumer contribution also. Thus, as per the provisions of MYT Regulations 2019, the proposed capex of Rs. 20/- Crore against consumer contribution will not have any impact on the ARR of the Company / Tariff of the consumers.

2.2.74 Further, the expenditure to be incurred on the projects /schemes would be implemented at different time frames and at different locations, making them totally different projects and none of the above single projects/schemes have cost more than the threshold of Rs. 10/- Crore other than those stated by the Petitioner in its Petition No. 1919 of 2022.

C. Commission's View

2.2.75 The Commission has considered the objections/suggestions made by the stakeholder & Licensee. The consumer can approach CGRF for grievances related to excess amount charged to the consumer and hence, the issue does not fall part of present proceedings. Further, any amount charged to the consumers is accounted under consumer contribution which is adjusted in the ARR of the Licensee and the same is dealt in the appropriate sections in this Tariff Order.

A. Comments / Suggestions of the Public

2.2.76 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted the comment related to file name 35 Annexure-15(B) CAPEX for project below Rs. 10/- Crore for FY 2023-24 wherein Annexure 10 B: Proposed Capital Expenditure of projects of value not exceeding Rs. 10/- Crore for FY 2023-24 in which at A1axii Transformer for new connection, Capex of Rs. 2.73/- Crore is indicated in regards it is necessary to know whether NPCL provide 100 kVA and 250 kVA transformer for connections below 50 kW. In case these are the connections for large number of connections, whether due diligence is done as per their own submission average loading of transformers is very low compared to norms of 70-80% loading. Whether NPCL can use its stock of transformers at site / stores to reduce this capex?

B. Petitioner's Response

2.2.77 As regards to the objection of Shri Ravi Sharma, the Petitioner states that the construction of 33/11 kV Substations are done based on the area development plan of the GNIDA and also to cater the increase in localized demand. Lands for 33 kV Substations are allotted by the GNIDA based on its Master Plan for the development of the identified area. Further it constructs 33/11 kV Substation initially with one 12.5 MVA Power Transformer with the provision of second Transformer in future as per the standard design with N – 1 reliability. Since the initial load of the newly developed Sectors / area is comparatively less, the MVA capacity as reflected would be more for some time.

2.2.78 The Petitioner further submitted that it adopts High Voltage Distribution System (HVDS) in case of LT Industries and PTW connections. It has also standardized distribution transformer ratings, for e.g. 100 kVA transformer is installed for LT consumers having up to 50 kW load and 10 kVA & 25 kVA transformers are installed for PTW connections having 5 / 7.5 HP & 10 HP load respectively. In addition to the above, since GNIDA establishes basic electrical network in the newly developed sectors/areas with the standard transformer capacity of 400 kVA for Urban, which is subsequently handed over to it for O&M, the Petitioner adopted the same network design while further upgrading the network in accordance with the increase in the load.

2.2.79 The Petitioner also stated that the peak demand of the different consumer categories are not concurrent and accordingly, it is observed that the peak load of LT consumers (mainly domestic & commercial, street lights, tube wells etc.) recorded around 320 – 350 MW resulting 50% to 80% loading on the transformers.

C. Commission's View

2.2.80 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. The CAPEX for Licensee for FY 2023-24 is considered as per MYT Regulations, 2019 in Chapter-6 of this Order. Further, the Commission will allow CAPEX while carrying out True-Up of relevant year after prudence check in accordance with the MYT Regulations, 2019.

A. Comments / Suggestions of the Public

2.2.81 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted the comment related to file name 35 Annexure-15(B) CAPEX for project below Rs. 10/- Crore for FY 2023-24 wherein Annexure 10 B: Proposed Capital Expenditure of projects of value not exceeding Rs. 10/- Crore for FY 2023-24 in which at A1bii for providing multiple point electricity connections, CAPEX of Rs. 4.78/- Crore for communication infrastructure is mentioned.

a) NPCL has not provided details of expenses in its Annexures. The expenses for 4000 meters is huge and since Ministry of Power has recommended Smart Meters on Total Expediture (ToTex), it is requested to the Commission that NPCL be directed to provide this service on Opex /ToTex mode so that huge impact of Capex is not in tariff.

b) NPCL should submit how much money it is charging from consumers against this expense?

2.2.82 The society individual connection capex is provided as follows:

A1c	**New Societies Individual Connection**			**Unit Rate Rs.**	**Rs. Cr.**
A1ci	Meter	Nos.	15,000	4,738	7.11
A1cii	Communication Infrastructure	Nos.	21,000	9,200	19.32
A1ciii	IT - Licensing and Implementation	Nos.	15,000	1,983	2.97
Sub-Total (A1c)					**29.40**

2.2.83 The total scheme is of Rs. 29.40/- Crore Incidentally, NPCL is spending Rs. 19.32/- Crore plus as above mentioned Rs. 4.78/- Crore only towards Communication infrastructure.

Shri Ravi Sharma submitted the following comments:

a) NPCL to evade Commission scrutiny, project is mentioned below Rs. 10/- Crore.

b) When Intellismart and Genus and Secure kind of companies can provide entire meters and communication infrastructure and IT licensing etc on Opex or ToTex mode, why NPCL want to carry out this project only on Capex Mode.

c) How many companies are providing above mentioned solutions? The hearsay is that one Company from Radiant is preferred for this solution at such high rates, which everyone understand that the Company be engaged in malpractice as mentioned in previous years of comments also.

d) Whether National Competitive Bidding for this solution is carried out by NPCL?

e) What interest is there to provide Work orders at such huge rates?

f) NPCL must bring all details in public glare by submitting to UPERC so that detailed comments can be provided.

B. Petitioner's Response

2.2.84 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that the Commission vide 13th Amendment of Electricity Supply Code directed to convert all single point connection into multi point connection and also new connections in multi-point only. The Commission is also monitoring the implementation of the same regularly further the Commission vide its Order dated August 05, 2020 had approved the cost of each multi-point connection to be charged from the consumer. Accordingly, it has made the estimate of the project based on the cost so approved and is making all of its effort for faster implementation of the direction of the Commission. Accordingly, the CAPEX has been proposed for the same.

2.2.85 The Petitioner further stated that the expenditure incurred on the projects /schemes new Societies Individual Connection would be implemented at different time frames and at different locations, making them totally different projects and none of the above single projects/schemes have cost more than the threshold of Rs. 10 /- Crore and the Complete details of the Capex concerning New Societies Individual Connections has been provided in the relevant chapters of the Petition for FY 2022-23 and ARR Petition for FY 2023-24.

C. Commission's View

2.2.86 The expenses that is shown by the licensee has been done as part of the Suo-Moto proceedings. Further, the Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. The CAPEX of Licensee for FY 2023-24 is considered as per MYT Regulations, 2019 in Chapter-6 of this Order. Further, the Commission will allow CAPEX while carrying out True-Up of relevant year after prudence check in accordance with the MYT Regulations, 2019.

A. Comments / Suggestions of the Public

2.2.87 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted pertaining to the Assets taken from GNIDA are shown as Rs. 1/- Crore, that NPCL has provided in previous years asset taken from GNIDA at much lower rates, however, in actual during true up, these assets are shown at much higher volume and the entire exercise of tariff calculations get disturbed due to this kind of carefree approach and thus NPCL be asked to provide a consent letter from GNIDA about approx. amount of assets to be transferred in the financial year.

B. Petitioner's Response

2.2.88 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that at the time of submission of ARR, due to lack of any information from GNIDA and other Local Area Development Authorities, it is not feasible for the Company to estimate the amount with certainty which might be handed over during any financial year. The fact is duly mentioned in our submissions. Due to the above circumstances, it considers a nominal value of Rs. 1/- Crore in its Capital expenditure for ensuring year.

2.2.89 The Petitioner further submitted that the value of assets handed over by GNIDA and others do not have any impact (R & M Expenses, Interest, Depreciation or RoE) on the truing up or ARR of the Company / tariff of the consumers as per the prevailing provisions of UPERC MYT Tariff Regulations, 2019. Thus, considering GNIDA asset at Rs. 1 /- Crore or Rs. 10 /- Crore is not going to impact the ARR at all.

C. Commission's View

2.2.90 The Commission has taken note of the objections/suggestions made by the stakeholder and as per the response of the Petitioner, there is no impact of the same in the ARR as per MYT Regulations, 2019.

A. Comments / Suggestions of the Public

2.2.91 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that there is huge number of poles are planned by NPCL (as shown in A2d.i) for replacement which shows poor quality of material purchased by NPCL whereas they are purchasing GI poles. Further, Rates have been taken for GI poles for SP-72, 13 mtr poles from 2 major companies of NPCL and rates are confirmed as Rs. 24,700/- per Pole whereas NPCL has considered cost of pole as Rs. 37,996/-. This is almost Rs. 13,296/- per pole i.e. 54% extra. It is not out of place to mention here that since, NPCL is very well aware of the facts that the Commission had already disallowed 25% of capex in view of its earlier tariff order, so they have inflated the rates at 54% extra which after deduction of 25%, still makes it 29% higher and Consumer has to pay for consequential expenses in terms of interest, depreciation and ROE for rest of life. Further, while UPPCL is using MS poles and taking depreciation in 25 years, NPCL is using GI poles for similar period for which we demand that NPCL be allowed only MS poles or for GI poles life of poles be considered as 40 years.

B. Petitioner's Response

2.2.92 As regards to the objection of Shri Ravi Sharma, the Petitioner states that the cost of 13 mtr pole as Rs. 24,700/- per pole cannot be verified, as the same is not provided in Cost Data Book 2019. Further, the Objector has assumed the cost of GI poles as Rs. 37,996/- for NPCL which cannot be verified as the source of his information is not known.

2.2.93 Further, the Petitioner mentioned that it has projected the Cost of GI pole an individual Pole as Rs. 28,609/- further, all inclusive of costs such as Pole Earthing, Safety Danger Board, Hardware Installation (channel bracket, Angle bracket with clamps), Erection of 12 mtr long Galvanised STP with concrete material (1:2:4) mix of 1'6" x 1' 6"x 7'4" , muffing work with proper finishing including loading / unloading from NPCL store to site and pole numbering at any location within Greater Noida., Supply of necessary Grouting materials (1:2:4) mix for 12 mtr long Galvanised STP and Insulators (Cost of all-inclusive is provided

Rs. 39,079/-)

2.2.94 The Petitioner stated that Objector based on the above unknown assumptions has on its own stated that the rates are inflated by 54% and has failed to consider the cost of associated equipment / erection. It is pertinent to mention that the Objector has not provided any specific Assets and therefore, the claim of the objector cannot be verified.

2.2.95 The claim of the objector that the life of GI poles is 40 years is self-assumed and cannot be verified.

C. Commission's View

2.2.96 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. The Commission has already issued the direction to the Petitioner that all the procurements made by the Petitioner should be through the competitive bidding only. The Petitioner is directed to file the compliance report of the same in next Tariff filing. Further, the Petitioner is directed to benchmark the similar / main items used in distribution with State Discoms in next Tariff filing.

A. Comments / Suggestions of the Public

2.2.97 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that the NPCL has trifurcated one complete scheme into three parts to evade scrutiny of Commission under Rs. 10/- Crore project approval and provided the details of Surajpur South Substation as follows:

B1	**Construction of 33/11 kV Substation**		**Qty**	**Unit Rate**	**Total Rs. Crore**
B1a	Refurbishment of Surajpur South 33/11kV Substation to 33kV Switching cum Substation with AIS Switchboard with Old Power Transformer	Nos.	1	3,77,18,922	3.77
B2a	Interconnection between 33kV Switching Substations and feeder evacuation from 33kV Switching Stations with 400sqmm cable	kM	10	37,15,212	3.72
D1	Civil Refurbishment of 33/11kV Surajpur South Substation with Boundary Wall		1	3,20,00,000	3.20
	Total				**10.69**

2.2.98 After Cross check following observation have came out:

a. The substation is working perfectly and it is servicing load to nearby 2 villages and industry area.

b. The NPCL has another substation at around 1 kM from this place known as sector Ecotech near Helicopter company. At this substation there is a huge transformer workshop and also switching panels.

c. Although our experts opined there is absolutely no requirement to change surajpur south substation, still, the Commission may constitute an expert committee to study and assess the requirements and benefits out of this project.

d. A substation building is approx. 2500 sqft. According to estimate of civil works, at Rs. 3.2/- Crore it works out to be approx. Rs. 12,800/- per sqft. At UPPCL it has been informed that this cost is approx. Rs. 7,000/- per sqft considering all cable trenches and switchyard foundation and boundary wall etc. As the Commission has already done the prudence checked in case of KP-1 and KP-4 office of NPCL and came to conclusion that NPCL creates the requisition of work which are not even required and then carry out at almost double of rates, the malafide intentions are well known.

B. Petitioner's Response

2.2.99 As regards to the objection of Shri Ravi Sharma, the Petitioner states that it has already submitted the detailed justification of Refurbishment of Surajpur South Substation in the relevant chapter of its Tariff Petition No. 1919 of 2022. which is reproduced herein below for ready reference of the Commission:

Quote:

Refurbishment of 33/11kV Substation at Surajpur South to 33kV Switching cum 33/11kV Substation with AIS switchboard:

The Company constructed 33/11kV Outdoor AIS type Substation at this location to cater the load of nearby area in the FY 1996-97.

With time, the condition of substation control room building has deteriorated as the same is almost 26 years old and the installed switchgears have also been outdated and obsolete from the market. Moreover, the availability of spares for routine O&M is also tough and hard to find. Implementation of Substation Automation and SCADA is also a big concern as the devices are not compatible for smart communication & data transfer over Realtime. Further, as the nearby industrial area has also developed and grown, there is also requirement of a switching substation to manage the load at 33kV voltage level apart from catering to 11kV consumers.

In view of the above, the Company proposes to refurbish the existing 33/11kV Substation and associated civil building and upgrade it to Indoor type AIS 33/11kV Substation cum Switching Station to cater the load of new and existing 33kV consumers in vicinity of the substation. Old installed 33/11kV 5 MVA Power Transformers shall be re-utilized.

The brief electrical configuration of the Substation will be as follows:

a. *33 kV: 2 No's Incomer+ 1 No. Bus Coupler cum Adapter Panel+ 2 No's Transformer Feeder Outgoings + 2 No's Feeder Outgoings with Indoor Type AIS Switchgear.*

b. *11 kV: 2 No's Incomer + 1 Bus Coupler+ 1 Adapter+ 8 No's Feeder Outgoings with Indoor Type AIS Switchgear.*

c. *33/11kV: Old existing 5 MVA Power Transformers shall be re-instated with provision of NIFPES (Nitrogen Injection Fire Protection & Extinguishing system).*

The refurbish substation will benefit the existing and new 33kV consumers utilizing the proposed 33kV switches and shall reduce the length and loading of 11kV feeders emanating from other nearby substations, creating N-1 redundancy and enhancing the reliability indices for the existing and future consumers. Further, it shall also accommodate the upcoming load growth of area in vicinity.

Unquote

2.2.100 The Petitioner further submitted that the Objector is trying to misguide the Commission by clubbing different projects which are not related to each other and trying to create an illusion that the total project cost more than Rs. 10 /- Crore which is not appropriate.

2.2.101 The Petitioner further stated that the Sr. no. "B2a. Interconnection between 33kV Switching Substations and feeder evacuation from 33kV Switching Stations with 400 sqmm cable" mentioned by the objector in its comment are to be used for interconnection between various & separate substation beside Surajpur South Substation and would be implemented in different time frames and at various locations, making them totally different projects and none of the above single projects/schemes have cost more than the threshold of Rs. 10 /- Crore Also, the order will be placed in phased manner as per the requirement. Thus, consolidating the cost of different projects and trying to create an illusion that the total project cost more than Rs. 10 /- Crore which is not appropriate.

C. Commission's View

2.2.102 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. Further, with regard to the Projects Cost exceeding Rs. 10 /- Crore, the Commission has dealt the issue in the Capital Expenditure section of True-up Chapter of Order.

A. Comments / Suggestions of the Public

2.2.103 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that NPCL is engaged in gold-plating and its capex is evident from the fact that cable for 33kV 400 sqmm Al cable is available in market at Rs. 2,350/- per meter from standard makes who are supplying to NPCL but it has considered the rates of Rs. 2,757/- per Sqmtr i.e. a margin of Rs. 407/- per meter, 17.31% higher than market rate. The logic of stores does not applicable as Stores capex it has considered and also it has considered 100% employee cost. We have found such excessive purchases in many items but Poles and cables are sufficient to investigate infirmities in data & facts placed by NPCL in purchasing poor quality of material at extra premium rates.

B2	**Construction of 33 kV Network**		**Qty**	**Unit Rate**	**Total Rs. Crore**
B2a	Interconnection between 33kV Switching Substations and feeder evacuation from 33kV Switching Stations with 400sqmm cable	KM	10	37,15,212	3.72
B2b	Laying of 33kV 400Sqmm UG Mains for Zone-1 Area	KM	8	37,15,212	2.97
B2c	Laying of 33kV 400Sqmm UG Mains for Zone-2 Area	KM	7	37,15,212	2.60
B2d	33 kV Overhead Mains with ACSR Panther	Ckt kM	2	25,31,870	0.51
B2e	Isolator Installation with Chair Structure	Nos.	40	2,73,283	1.09
	Sub-Total (B2)				**10.89**

B. Petitioner's Response

2.2.104 As regards to the objection of Shri Ravi Sharma, the Petitioner states that the interconnection between 33kV Switching Substations and feeder evacuation from 33kV Switching Stations with 400sqmm cable" has already included by the Objector on above Comment for which the company has already given explanation above. However, the objector is again including the cost of this project along with the cost of cables. Thus, Further, the Objector is trying to misguide the Commission by clubbing different projects which are not related to each other to create an illusion that the total cost of the project is more than Rs. 10 /- Crore which is factually incorrect.

2.2.105 The Petitioner further submitted that the expenditure incurred on the projects /schemes of Cable Laying would be implemented at different time frames and at different locations, making them totally different projects and none of the above single projects/schemes have cost more than the threshold of Rs. 10 /- Crore. Also, the order will be placed in phased manner as per the requirement.

2.2.106 The Objector has made self-assumed claim that the cost of 33 kV 400 sqmm AI cable is costing Rs. 2,350/- per meter. The basis of this assumption is not known and therefore, the same cannot be verified.

C. Commission's View

2.2.107 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. The Commission has already issued the direction to the Petitioner that all the procurements made by the Petitioner should be through the competitive bidding only. The Petitioner is directed to file the compliance report of the same in next Tariff filing. Further, the Petitioner is directed to benchmark the similar / main items used in distribution with State Discoms in next Tariff filing.

A. Comments / Suggestions of the Public

2.2.108 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that NPCL has intentionally splitted one scheme into multiple project to evade the Commission scrutiny as below Rs. 10 /- crore CAPEX to avoid the scrutiny in terms of MYT Tariff Regulations, 2019.

2.2.109 It can be seen that I beam for transformer is one of the item of entire scheme which comprises of following:

a. I Beam
b. 400 kVA transformer
c. RMU
d. LT Feeder pillar
e. 11kV cables to connect
f. LT feeder cables
g. Fencing of structure

2.2.110 NPCL may be directed to explain the reason why they want to avoid scrutiny of the Commission while splitting one scheme into pieces?

B3b	**11 kV Underground Mains**		qty	Unit Rate	Total Cr
B3b.i	11 kV UG Mains with 300 sqmm cable	KM	20	24,09,424	4.82
B3b.ii	11 kV UG Mains with 150 sqmm cable	KM	5	15,16,400	0.76
B3c	11 kV RMU Installation	Nos.	60	7,00,873	4.21
B3d	11kV Isolator Installation	Nos.	30	58,610	0.18
B3e	Installation of Chair Structure for Isolator &Transformer	Nos.	80	1,61,546	1.29
B3fc	Installation of I Beam Structure for Transformer	Nos.	10	2,50,000	0.25
					11.50

B. Petitioner's Response

2.2.111 As regards to the objection of Shri Ravi Sharma, the Petitioner states that the Objector is trying to misguide the Commission by clubbing different projects which are not related to each other and trying to create an illusion that the total cost of the project is more than Rs. 10 /- Crore which is factually incorrect.

2.2.112 The Petitioner further submitted that the expenditure incurred on the projects /schemes of Cable Laying and other equipment would be implemented at different time frames and at different locations, making them totally different projects and none of the above single projects/schemes have cost more than the threshold of Rs. 10 Crore Also, the orders will be placed in phased manner as per the requirement.

C. Commission's View

2.2.113 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. Further, with regard to the Projects Cost exceeding

Rs. 10/- Crore, the Commission has dealt the issue in the relevant chapters.

A. Comments / Suggestions of the Public

2.2.114 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that NPCL is splitting scheme into multiple projects just to evade scrutiny of Commission. Generally, when purchase process of material is shabby or with vested interests. As per A1axii Total budget of Rs. 10.93/- Crore split in multiple projects and demanded the Commission may call all documents for purchase of power and distribution transformers in last 5 years by NPCL so that huge discrepancies and infirmities may be unearthed by Commission.

A1axii	**New Transformer installation for New Connection**		**Qty**	**Unit Rate**	**Total Rs Cr**
A1axii.a	250 kVA (3-Ph)	Nos.	4	9,58,261	0.38
A1axii.b	100 kVA (3-Ph)	Nos.	80	2,92,900	2.34
A1axii.c	25 kVA (3-Ph)	Nos.	30	1,84,892	0.55
B3g	**New 11/0.4kV Transformer installation for Network Development**				
B3g.i	400 kVA (3-Ph)	Nos.	20	16,63,338	3.33
B3g.ii	250 kVA (3-Ph)	Nos.	30	9,58,261	2.87
B3g.iii	100 kVA (3-Ph)	Nos.	50	2,92,900	1.46
	Total				10.93

B. Petitioner's Response

2.2.115 As regards to the objection of Shri Ravi Sharma, the Petitioner states that the Objector is trying to misguide the Commission by clubbing different projects which are not related to each other and trying to create an illusion that the total cost of the project is more than

Rs. 10 /- Crore which is factually incorrect.

2.2.116 Further, the expenditure incurred on the projects /schemes of Transformers would be implemented at different time frames and at different locations, making them totally different projects and none of the above single projects/schemes have cost more than the threshold of Rs. 10/- Crore. Also, the orders will be placed in phased manner as per the requirement.

C. Commission's View

2.2.117 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. Further, with regard to the Projects Cost exceeding Rs. 10 /- Crore, the Commission has dealt the issue in the Capital Expenditure section of True-up Chapter of Order.

A. Comments / Suggestions of the Public

2.2.118 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted with respect to NPCL Capex on metering without any result- LT CT metering that it is incurring expenses of Rs. 6.66 /- Crore just to comply with UPERC directives. The question here is what is the outcome and gains to consumers with similar kind of expenses done by Company in the past. Just because it has access to capital market does not mean that NPCL carry out Gold plated projects whether there is any advantage or not. It is kindly requested that NPCL provide Pay back and also results of earlier similar project.

B8	**Metering for Regulatory Compliance requirement**				Total Rs. Cr
B8.i	LTCT Metering of Transformers including LTCT's, Meter & communication Infrastructure	Nos.	2,500	25,656	6.66
	Sub-Total (B8)				6.66

B. Petitioner's Response

2.2.119 As regards to the objection of Shri Ravi Sharma, the Petitioner states that the Objector

Keeping in view the directions of the Commission, provisions of the Ministry of Power (CEA) (Installation and Operation of Meters) (Amendment) Regulations, 2019 vide Notification dated August 17, 2021 and The Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021, the Company has taken up the project of DT and Feeder metering during FY 2023-24 with an aim to cover metering for 100% DTs having rated capacity of 25 kVA and above. Accordingly, with the aim of driving Energy Audit, the Company has initiated the task of metering all 25 kVA and above Distribution Transformers (DTs) in next one year. Accordingly, metering of approx. 2500 Distribution Transformers (DTs) of capacity 25 kVA and above has been planned for FY 2023-24.

2.2.120 The overall project comprises of installation and commissioning Energy Meters, LTCTs, Meter Boxes and associated communication devices along with HES application, Software Applications, IT Hardware, Data exchange and integration to fulfil the reporting requirements.

C. Commission's View

2.2.121 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. There is provision in the MYT Regulation, 2019 for prudence check, cost-benefit analysis and other aspects that may have bearing on the Tariff. The approval for Capital investment is granted only after considering these aspects.

A. Comments / Suggestions of the Public

2.2.122 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that NPCL is investing too much on communication infrastructure probably in Greater Noida even Vodafone is not spending this much amount on communication infrastructure.

B. Petitioner's Response

2.2.123 As regards to the objection of Shri Ravi Sharma, the Petitioner states that the SCADA system plays an important role to improve operational efficiency and reduce outage time. Reliable Communication connectivity for SCADA System is essential for centralised

Operational control room equipped with SCADA System. Optical Fibre system is adopted by all the Power utilities across India as communication media at primary Substations with ring connectivity as communication Media. NPCL provided communication connectivity at Primary Substations for SCADA system and Other applications.

2.2.124 Further the Petitioner state that the Optical ground wire is also being used by various Power Utilities, including the State Transmission Utility of Uttar Pradesh i.e. UPPTCL on transmission line for real time telemetry data.

C. Commission's View

2.2.125 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. There is provision in the MYT Regulation, 2019 for prudence check, cost-benefit analysis and other aspects that may have bearing on the Tariff. The approval for Capital investment is granted only after considering these aspects.

A. Comments / Suggestions of the Public

2.2.126 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that the NPCL has referred O&M work as CAPEX as it can be observed from the name of Loss Control, entire CAPEX is replacement or O&M related.

a. Replacement of LT AB: Wherever cable is burnt, it needs to be replaced and such replacement is part of O&M activity as also in case of UPPCL. UPERC must allow these works only in R&M

b. Anti-theft DB: In every Discom Distribution box etc. are installed on poles and when poor quality of boxes gets broken these are required to be replaced by new ones specially where theft occurs. They have not shown any revenue from theft. This work is also falling into R&M activity and it is not a capital project

c. Meter Shifting in no way can be capital job, it is purely a R&M job.

B9	**Lost Control Activities**		Qty	Unit Rate	Total Rs.Cr
B9.i	Replacement/Augmentation of LT AB cable to XLPE Armoured cable	KM	45	11,25,332	5.10

B9.ii	Installation of Anti Power Theft Pole Mounted Distribution Box	Nos.	790	12,975	1.03
B9.iii	Meter Shifting and Refurbishment of Service cable	Nos.	7,980	3,431	2.74
	Sub-Total (B9)				8.86

2.2.127 The Commission may check how NPCL is looting the consumers. They can give entire contract to Intelli-smart / Genus / Adani / GMR / Secure who can on per month basis fee can provide smart metering to all consumers.

2.2.128 Further Shri Ravi Sharma demanded that the NPCL capex for last 10 years be checked and whatever R&M amount is shown as CAPEX be disallowed.

B. Petitioner's Response

2.2.129 As regards to the objection of Shri Ravi Sharma, the Petitioner states that the Commission vide its Business Plan Order dated November 22, 2022 has approved the T&D Losses of the Company at 7.63%. Thus, in order to comply the directions of the Commission, it require Capex to the achieve the T&D Losses as prescribed. It has proposed the Capex proposed on account of Loss Reduction Activities.

2.2.130 The Petitioner further stated that the NPCL serves in 118 villages in its License area. Despite various difficulties and constrains the it continues to maintain lowest T&D loss in the state of UP, which is one of the best in India. NPCL submits that theft of electricity is the main contributor to such loss. NPCL operate their loss control activity in a hostile environment where stiff opposition from miscreants, physical violence and continuous threats to our staff are on the rise. It has been facing challenges to reduce T&D Losses through various means such as (i) illegal hooking by damaging Distribution Box, (ii) theft of electricity by meter tampering (iii) Meter bypass, (iv) Tampered Service cables, (v) theft of electricity by puncturing ABC cable in rural areas etc.

2.2.131 To curb theft from LT network and meter, below mentioned network improvement initiative has been planned in 16 nos. of Rural 11 KV feeders under Loss reduction Capex estimated at Rs. 8.86 /- Crore for FY 2023-24:

1. LT ABC to Armoured network cable replacement:

In dense rural streets, it is very prominent to steal power by tamper LT ABC or inserting nails on LT ABC network cable and connect illegal wires for whole day or specially in night time. Earlier laid LT ABC networks in rural street has been damaged in various places. For remedial action, LT ABC network cable will be replaced with Armoured Cable of suitable size which is hard to tamper or insert nails.

2. Pole Replacement:

In rural area in the dense streets PCC LT poles are easily accessible by consumer from roof top. During inspection it is observed that LT network has been tamper at pole and illegal wire is connected or provision has been made to connect illegal wire in night time. In some location poles are found tilted and bent. Trough capex of FY 2023-24, conventional PCC pole will be replaced by STP pole to cater load of armoured cable and distance from approach of consumers. Other than reducing theft, illegal restoration of supply by temporary disconnected consumer will also be reduced.

To curb power theft by damaging meter, meter accessories and network assets, it is required to implement above mentioned network improvement initiatives. To meet above mentioned network imprudent initiatives substantial investment are required. These initiatives will also safe-guard consumers interest for noble consumers. This will enhance the reliability, reduction in T&D losses, safe environment, meeting new load requirement and efficiency improvement along with customer satisfaction.

3. Meter Shifting from inside to outside:

In rural area, most of the consumers meters are installed inside premises. Arrangements has been made by consumers in meter terminal to bypass supply of meter. To inspect and collect evidence, inspection team has to knock and enter inside premises. During inspection consumer easily suppress the evidence and then allow team for inspection. Even sometime do not allow team to inspection inside premises. To cater this problem, meter needs to shift from inside of premises to outside at visible location so that inspection team can easily inspect if there are any tampering with meter or meter bypass at terminal. It will also help in meter reading as meter reader don't have to enter premises and reading of meter is accessible even premises is locked.

4. Meter inside push-fit box:

In the conventional box, it gets open at ease and consumers may bypass meters at odd hours or in the absence of inspection team. Push-fit box needs to be broken completely to access meter terminal or meter. In place of conventional meter box, push-fit type meter box will be used.

5. Service cable optimization:

Service cable laid over roof or balcony of consumer or concealed inside wall of consumer in rural area, there are theft cases identified as service cable has been tampered and supply is being used illegally. To reduce theft in such way, service cable of consumer needs to replaced with armoured cable and from source to meter incoming terminal, service cable will be completely visible. It will be easier for inspection team to detect theft if service cable is tampered.

6. Replacement of broken of damaged Distribution Box:

In rural area, there are dense streets in many pockets. Construction of new house and modification of existing premises is in full swing in these 118 villages. There are already narrow street. Earlier laid LT network has cone to proximity of balcony or windows of consumer premises. Distribution box near these premises is being damaged by consumers and used illegal supply from these open or damaged distribution box. To curb power theft from distribution box, the Company shall replace all damaged distribution box with new one and in some very congested places Remote operated anti-theft distribution box will be installed through capex work of FY 2023-24.

2.2.132 The Petitioner further projected to incur the amount towards CAPEX aggregating to Rs. 8.86 /- Crore on Loss Control Activities which will be undertaken in different time frame and at different locations during FY 2023-24 details of which are given in Annexure-15(b) of Petition No. 1919 of 2022.

2.2.133 It is further submitted that whenever a damaged equipment is replaced with a new one, in accordance with Indian Accounting Standards and best accounting practices, the old replaced asset is retired / decapitalised from FAR and the new one is capitalised at its current cost. Thus, it is quite apparent that the new asset erected has a new set of life and will be used over a longer period and thus, cannot be charged to R & M Expenses.

2.2.134 Accordingly, the Petitioner requested the Commission to approve the CAPEX of Rs. 8.86 /- Crore for the above work.

C. Commission's View

2.2.135 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. The O&M and CAPEX have been appropriately dealt as per the MYT Regulations, 2019.

A. Comments / Suggestions of the Public

2.2.136 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that the communication infrastructure is building up with huge CAPEX which looks like NPCL has taken Telecom license, and demanded the Commission may do scrutiny of CAPEX for communication infrastructure.

C3	**Upgradation/Development of communication Systems (C3)**		Qty	Unit Rate	Total Rs. Cr
a)	Development of Communication Infrastructure using Optical Fibre & RF System	Qty	1	90,00,000	0.90
b)	Upgradation & Installation of Communication Accessories & IP-PBX System at new Substations, warehouse, offices etc.	LS	1	10,00,000	0.10
c)	Fibre connectivity of pocket substations for CCTV and SCADA System	LS	15	2,50,000	0.38

B. Petitioner's Response

2.2.137 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that the SCADA system plays an important role to improve operational efficiency and reduce outage time. Reliable Communication connectivity for SCADA System is essential for centralised Operational control room equipped with SCADA System. Optical Fibre system is adopted by Power utilities as communication media at primary Substations with ring connectivity as communication Media. NPCL provided communication connectivity at Primary Substations for SCADA system and Other applications.

2.2.138 Further it is pertinent to mention that Optical ground wire is being used by various Power Utilities, including the State Transmission Utility of Uttar Pradesh i.e. UPPTCL on transmission line for real time telemetry data

C. Commission's View

2.2.139 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. There is provision in the MYT Regulation, 2019 for prudence check, cost-benefit analysis and other aspects that may have bearing on the Tariff. The approval for Capital investment is granted only after considering these aspects.

A. Comments / Suggestions of the Public

2.2.140 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted with respect to Capex as mentioned at C5 (e) Battery Storage at Rs. 5.5 /- Crore that it is to be noted here that NVVN and SECI have conducted bids for Battery Storage Power which should be purchased by NPCL and Capex cannot be allowed for "Power Purchase Plan" under Capex. NPCL must demonstrate gains with own capex vs power purchase from SECI/ NVVN from battery storage project. It is not out of place to mention here that it is due to the vested interest of NPCL, they are most interested in Capex, without scrutiny of Commission, even for disallowance of 25% of capex by the Commission.

B. Petitioner's Response

2.2.141 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that the CAPEX under battery storage was provisioned for in accordance with the Commission's Direction in para 10.3.11 of Tariff Order dated July 20, 2022.

2.2.142 The Company in Appendix-VII (Compliance of the Commission's Directives) of its Petition

No. 1919 of 2022 had stated in its reply to the aforesaid direction that

Quote

Noted for Compliance

The Hon'ble Commission is kindly requested to consider the submission of the Company for approving the additional O&M expenditure as prayed in the instant petition under the head of O&M expenditure

Unquote

2.2.143 Further, it is pertinent to mention that the Commission vide Order dated November 22, 2022 has restrained the company from entering into LTPPA beyond June 2029. The Company has filed a review petition of 'Business Plan Order' dated November 22, 2022 to allow the Company to tie up LTPPA power. Also, in the petition the Company has submitted the details of an application regarding tie up of LTPPA power from the Solar Wind hybrid power along with Energy Storage System through SECI. Necessary action will be taken upon receiving the suitable direction from the Commission.

C. Commission's View

2.2.144 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. The CAPEX for Licensee for FY 2023-24 is considered as per MYT Regulations, 2019 in chapter-6 of this Order. Further, the Commission will allow CAPEX while carrying out True-Up of relevant year after prudence check in accordance with the MYT Regulations, 2019.

A. Comments / Suggestions of the Public

2.2.145 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted the Comments on Capex under Business Continuity of GIS and associated Processes (C6) that the Commission may observed that GIS has been implemented and in past years NPCL has spent more than Rs. 8/- Crore but they have failed to demonstrate any advantage. NPCL management must provide on affidavit as followings:

a) Now all electricity connections are provided using GIS applications and nowhere any person go for field inspection.

b) GIS map for network is completely updated.

c) Technical losses can be determined using GIS network and NPCL must provide weekly losses from GIS network for FY 21-22 and FY 22-23 for each 33kV and 11kV feeder. It should also provide T&D losses for each 400 kVA transformer with location of Transformer using GIS network.

d) How much reliability is improved using GIS network Unless NPCL failed to provide above information, capex on this account may kindly be not allowed.

C6	**Business Continuity of GIS and associated Processes (C6)**		Qty	Unit rate	Rs. Cr	Remarks
a)	Survey Equipment procurement for field data collection and Physical Asset verification			1,32,000		How many were purchased in earlier years.Generally, these are outsourced services, capex can not be allowed for O&M services
b)	Procurement of Rugged mobile devices for Mobile Enterprise Solution			1,70,000		How many were purchased in earlier years. Generally, these are outsourced services, capex can not be allowed for O&M services. **Hon'ble UPERC may check whether NPCL is purchasing latest version of I phones as such items always be avoided from knowledge of employees and Hon'ble UPERC**
c)	Implementation of Mobile Enterprise Suite software					Outsourced service's
d)	Drone hardware cost (Drones with advanced sensors)					Outsourced service's
e)	Specialized Work Station for drone data processioning (128GB with advanced GPU like Nvidia GeForce RTX 2080 Ti)					Outsourced service's
f)	Cable locator for tap based theft					Why it is not in Loss control

	identification in underground cables					activity? Whether NPCL purchasing it for first time? On India Mart such equipment's are available in less than Rs 1 Lac , why NPCL is not exploiting that , with a single device first
g)	Procurement of VTS (Vehicle tracking system)					Most of vehicle comes with available GPS tracker. Further this is not more than 5000 per car, shows company want to spend 4-5 times
h)	Specified laptops (e.g. Lenovo ThinkPad P52) for Virtual Reality (VR) and Augmented Reality (AR)					It appears that somehow NPCL has to spend money. The UPERC is requested to give them direction for getting these services from vendors instead of purchasing entire system. Do they really want to commercialise it?
i)	Enhancement of VR software platform					
	Sub-Total				1.41	

B. Petitioner's Response

2.2.146 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that it has to Comply with the Regulations of the Commission and in Clause 7.1 b of the Electricity Supply Code, 2005, states that the implementation of GIS is required and its system must be updated regularly. The clause is reproduced below for your reference.

Quote:

(b) Special emphasis should be placed on proper maintenance and updation of consumer indexing and GIS/GPS base mapping in a time bound manner through use of modern IT based system. Consumer Analysis Tools (CAT) to identify suspected problems/anomalies/and identify trends in metering, billing and collection to enable further action needed to be taken.

Unquote:

2.2.147 GIS applications and data aid with shortest route, estimate preparation for any new connection requested. It reduces the number of onsite visits, but certainly for QC purpose visit is required.

2.2.148 GIS Map for network is completely updated and used for planning, monitoring, and management of the network. Further, GIS Application assist in Network Augmentation, Network re-organization, New connections etc.

2.2.149 For the reliability purpose GIS assist to other function by providing timely updated data for accurate reflection of network and consumers for accurate planning of network augmentation, route optimization.

C. Commission's View

2.2.150 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. The CAPEX for Licensee for FY 2023-24 is considered as per MYT Regulations, 2019 in chapter-6 of this Order. Further, the Commission will allow CAPEX while carrying out True-Up of relevant year after prudence check in accordance with the MYT Regulations, 2019.

A. Comments / Suggestions of the Public

2.2.151 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted the comments related to the civil works as depicted in below table:

D1	Civil Refurbishment of 33/11kV Surajpur South Substation with Boundary Wall		1	3,20,00,000	3.20	It is explained above, without scrutiny of project under Rs 10 Cr, as to be clubbed with electrical, capex to be not allowed
D2	Boundary wall of 11/0.4 kV Txr Houses	Location	10	16,00,000	1.60	Boundary wall expenses are not more than Rs 2-3 lac , as it is property of GNIDA. Cost to be recovered from GNIDA.

D4	Misc Civil works	L S	1	50,00,000	0.50	NPCL had booked expenses for scrap yard in earlier years also at Site C. Also why it do not sell of scrap on monthly basis
D5	Other Office facilities	L	1	50,00,000	0.50	Need to be defined about facilities
Group-					6.05	

B. Petitioner's Response

2.2.152 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted regarding Comment on line item "D1 Civil Refurbishment of 33/11kV Surajpur South Substation with Boundary Wall", it has already submitted its reply in above comment.

2.2.153 Concerning the amounts mentioned in the remaining Line items it submits that the estimation has been done based on its experience over the years and the best rates available at the time of filing of Tariff Petition No. 1919 of 2022. Further, the Petitioner would be submitting the Actual expenditure to the Commission for their Prudence check and approval.

C. Commission's View

2.2.154 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. The CAPEX for Licensee for FY 2023-24 is considered as per MYT Regulations, 2019 in Chapter-6 of this Order. Further, the Commission will allow CAPEX while carrying out True-Up of relevant year after prudence check in accordance with the MYT Regulations, 2019.

A. Comments / Suggestions of the Public

2.2.155 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that IT projects Budget is kept just below Rs.10/- Crore to avoid scrutiny. Now UPPCL and other discoms are taking most of services on per unit of services basis to reduce cost.

E		**IT Projects**					Remarks
E	E1	Implementation of Software Applications	LS	1	3,95,00,000	3.95	What is difference between E1 and E5
	E2	Upgrading of Hardware Infrastructure Capacity	LS	1	2,35,00,000	2.35	Under Cloud services should be taken
	E3	Upgrading of Networking Infrastructure	LS	1	20,25,000	0.20	
	E4	Purchase of Computers, Peripherals & Accessories	LS	1	1,86,00,000	1.86	One Computer at Rs 1.86 Cr, seems NPCL want to purchase Super Computer. Considering at Rs 50 K per Computer, almost 350 number of computer they want to purchase for 600 employees. Now a days, they can get computers also on rent.
	E5	Purchase of Software Licenses	LS	1	1,06,00,000	1.06	
	Group-Total (E)					**9.42**	

B. Petitioner's Response

2.2.156 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that total Budget of all IT Projects/ Initiatives proposed for FY 2023-24 has been proposed as Rs. 9.24/- Crores. Thus Rs. 9.24/- Crores represents the sum-total of Budgets of many individual IT Projects which would be implemented across the Company in different time frames. In case the budget of any of the individual IT Projects had exceeded Rs. 10 Crores, The Company would have approached the Commission in accordance with UPERC MYT Tariff Regulations, 2019, as has been done in the case of Petition No. 1927 of 2022 dated December 19, 2022 for the project titled "Creating Cyber Resilience".

2.2.157 Further, the proposed projects involve Software Implementation, e.g. Implementation of Enhancements to SAP S/4HANA, etc. and for acquisition of licenses, e.g. User Licenses of SAP S/4HANA, purchase of multiple desktops, laptops and peripherals such as printers, scanners, etc.

2.2.158 Also, Migrating Hardware Infrastructure to the Cloud would involve incurring additional

O&M expenses, which can only be opted for if approved by the Commission.

C. Commission's View

2.2.159 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. The CAPEX for Licensee for FY 2023-24 is considered as per MYT Regulations, 2019 in chapter-6 of this Order. Further, the Commission will allow CAPEX while carrying out True-Up of relevant year after prudence check in accordance with the MYT Regulations, 2019.

A. Comments / Suggestions of the Public

2.2.160 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted related to the Meter Testing Equipment that NPCL has at several heads they have shown meter and its related items to avoid Commission scrutiny:

F		**Tools & Testing Equipments**					Remarks
	F1	Meter Testing Equipment	LS	4	25,00,000	1.00	Whether NPCL is purchasing Meter testing equipment first time? How much amount on these heads is incurred in last 12 years? NPCL is having NABL lab, why do they need one more lab?
	F2	Testing Equipment & Transformer Test Equipment	LS	1	72,00,000	0.72	
	F3	Safety Equipment	LS	1	10,00,000	0.10	
	F4	Meter Test Bench (NABLAB)	LS	1	1,00,00,000	1.00	
F	F5	HT Meter & Instrument Transformer Testing LAB & Training centre	LS	1	25,00,000	0.25	These are paid services by many meter companies and NPTI etc in Noida itself. They have seniors and also so many meter testing equipment, NABL lab, there should not be any further need of Training centre They must inform how many people they have deployed for meter testing Generally meter testing services are taken from outsourcing agencies like secure meters etc, do they use it?
	F6	Arial Truck Mounted Hydraulic Lift	LS	1		0.30	Contractors deployed on works only provide this kind of assets. First they want to purchase truck then they need profit of 16% on it also.
	Group-Total (F)					1.00	

B. Petitioner's Response

2.2.161 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that company has already submitted item wise details & Justification in Chapter 6 of Appendix-V of its Tariff Petition No. 1919 of 2022. Further, for the ready reference of the Commission it hereby providing a gist as follows:

2.2.162 Meter testing equipment is necessary for conducting field tests on meters in response to consumer complaints or for regular meter testing. Such equipment has been previously purchased as well. Each field team must have the test equipment with them when working in the field for testing purposes. Consequently, it is necessary to acquire additional test equipment.

2.2.163 The reason for proposing an additional test bench is that the existing meter test bench is more than 10 years old and do not have many of newly developed functionality to test smart meters with more combinations. Therefore, a new test bench is being proposed to fulfil the additional requirement of meter testing for advanced meters, specifically smart meters and power quality meters.

2.2.164 A proposal has been put forward to establish an HT Meter and Instrument Transformer Testing Lab & Training Centre. This facility aims to develop in-house testing capabilities for both old and new materials, as well as provide training for field personnel. Furthermore, the facility would be utilized to train outsourced personnel who are regularly rotated. Therefore, establishing an in-house lab and training centre would help in improvement of overall efficiency.

2.2.165 Arial Truck/Mobile & Elevated Work Platform has been proposed in view of enhancing safety of breakdown team personnel. These platforms are equipped with Boom and Bucket platform, which ensure trouble free operation for the breakdown repair personnel in case of overhead line faults. They shall also be useful in trimming of extended branches of trees, which often lead to line faults.

C. Commission's View

2.2.166 The Commission has taken note of the objections/suggestions made by the stakeholder.

A. Comments / Suggestions of the Public

2.2.167 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted as follows:

H		**Demand Supply Management**					
	H1	Roof-top Solar Panels	LS				On Resco mode, developer can provide
	H2	Solar Water Heater	LS				On Resco mode, developer can provide O&M activity, to save losses
	H3	Distribution of CFL	LS				O&M activity, to save losses
	H4	Distribution of Solar lanterns in rural areas	LS				O&M activity, to save losses
H	H5	Promotion of Energy Saving / Reduction of Electricity Wastage	LS		10000000	1.00	O&M activity, to save losses
	H6	Small Solar Plants in Villages	LS				O&M activity, to save losses
	H7	Solar Pumps	LS				On Resco mode, developer can provide
	H8	Peak Load Management	LS				What is this about?
	H9	Energy Storage	LS				Again energy storage?
	H10	Energy Management System Implementation	LS				UPPCL, MP, Bihar and many other states are taking this service linked to performance. O&M activity
	Group-Total(H)					1.00	

B. Petitioner's Response

2.2.168 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that it has already mentioned in Chapter-6 of Appendix-V in its Tariff Petition No. 1919 of 2022 the same has been reproduced below for the ready reference of the Commission, it submits that the proposed project is on estimation basis and after preparing the complete plan, it will submit the same to the Commission for its prior-approval.

Quote

a) *The Company has always taken initiatives to meet the demand of consumers by arranging additional network & power. However, at the same time the Company also appreciates DSM techniques to conserve the precious energy & environment. A lot of initiatives have been taken up in this regard by the Company in the previous Control Period, which include Promotion of Roof-top Solar Panels, Solar Water Heater, Energy Saving / Reduction of Electricity Wastage and Distribution of Solar lanterns in rural areas, CFL etc. In the current FY 2020-21, Company has planned to take new initiatives such as Promotion of Small Solar Plants in Villages, Solar Pumps, Peak Load Management, Energy Storage, Energy Management System Implementation etc.*

b) The Company aims to introduce Demand Response to mid to large segment consumers, which can rapidly create "Negawatts" by curtailing energy usage in a pre-planned way through energy conservation. Curtailments during peak hours without impacting normal operations through carefully designed curtailment programs will be gradually rolled-out across the licensed area. The Company is initially targeting power savings of around 2 to 3 per cent of the peak demand.

c) Electricity theft in the rural areas is one of the major concerns for the Company. The Petitioner is in active discussion with leading consultants and agencies for installation of Roof-top/Ground Mounted Solar Plants in Rural Household Areas.

d) Accordingly, the Company has projected an expenditure of Rs. 1.0 /- Cr during FY 2020-21 and after preparing the complete plan with cost-benefit analysis, the

Company will submit the same to the Hon'ble Commission for its prior-approval.

a. During FY 2020-21, the Company has estimated Capital Expenditure for above-mentioned DSM activities, which is detailed as below:

Table-30: DSM Activities (FY 2020-21) ***Rs. Cr.***		
Sl. No.	***Description***	***Estimated***
1	*Roof-top Solar Panels*	*1.00*
2	*Solar Water Heater*	
3	*Distribution of CFL*	
4	*Distribution of Solar lanterns in rural areas*	
5	*Promotion of Energy Saving / Reduction of Electricity Wastage*	
6	*Small Solar Plants in Villages*	
7	*Solar Pumps*	
8	*Peak Load Management*	
9	*Energy Storage*	
10	*Energy Management System Implementation*	

Unquote

C. Commission's View

2.2.169 The Commission has taken note of the objections/suggestions made by the stakeholder & reply filed by the Petitioner.

A. Comments / Suggestions of the Public

2.2.170 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted comments on the proposed capital expenditure of projects of value not exceeding and exceeding Rs. 10 crores for FY 2023-24. The Commission shall carry out scrutiny of projects after receiving DPR of projects and submission for approval through Separate petitions, we shall submit detailed comments at the appropriate moment when NPCL submits its petition for this Capex Approval.

2.2.171 Few points are only raised which NPCL should take into consideration at time of submission of Petition:

1. It has submitted 33/11kV Substations as AIS substation and GIS Substation. It must provide details if AIS substations have 33kV outdoor switchyards?

2.The logic of considering Substation cost without cost of Civil construction and associated 33kV and 11kV Lines

3.Why land for GIS substation is taken so big as GIS substation can be constructed only in 800-900 sqmtr land.

4. Whether entire construction and equipment shall be awarded by Open Competitive Bidding at National level?

5. What is the reason that only one power transformer is considered. Even if second power transformer is to be placed later on, can not the existing load be fed by nearby substation?

6. What is loading on power transformers of nearby substations?

7. Logic of 9 board GIS panels?

8. When NPCL can purchase a power transformer at Rs 1.28 Cr, why it has considered so high cost of power transformer? Why NPCL officials are so interested in purchasing each item? What is logic that when entire substation can be built up by open competitive bidding at 75-78% of cost, NPCL want to purchase each time on its own and build high cost?

9. It is not out of place to mention here that Hon'ble UPERC may be aware that BOOT model has reduced cost by almost 20% and therefore now BOOT model is only preferred model. Therefore, It is humbly requested to Hon'ble UPERC to direct NPCL to provide entire package of Substations which are being built under BOOT model by reputed Companies whereas cost shall be paid on yearly basis for a period of 35 years.

B. Petitioner's Response

2.2.172 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that it has already filed separate petitions along with all the details & explanations for its projects above 10 Cr. before the Commission as follows:

S. No.	Petition No.	Detail
1	1927 of 2022	Creating Cyber Resilience
2	1950 of 2023	Power Evacuation Plan from Upcoming 220 kV & 132 kV Grid Substations being constructed in Greater Noida

2.2.173 The abovementioned petitions are currently under examination and prudence check before the Commission.

C. Commission's View

2.2.174 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner. The CAPEX for Licensee for FY 2023-24 is considered as per MYT Regulations, 2019 in chapter-6 of this Order. Further, the Commission will allow CAPEX while carrying out True-Up of relevant year after prudence check in accordance with the MYT Regulations, 2019.

METERING

A. Comments / Suggestions of the Public

2.2.175 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that the NPCL has provided replacement assets which are huge in numbers and shows quality products are not purchased by NPCL even after paying huge premium to vendors, which is obvious for reasons known to the officers of NPCL engaged in purchase of material.

A2b	Replacement of Instrument Transformers due to Burnt/defective	UOM	Numbers	Unit Rate	Total Cr
A2b.i	11 kV CT	Nos.	200	6,879	0.14
A2b.ii	11 kV PT	Nos.	150	24,402	0.37
A2b.iii	33 kV CT	Nos.	75	15,914	0.12
A2b.iv	33 kV PT	Nos.	60	26,388	0.16

A2b.v	11 kV Composite CTPT	Nos.	20	42,834	0.09
A2b.vi	33 kV Composite CTPT	Nos.	15	1,29,800	0.19
A2b.vii	11kV Metering Cubicle with instrument Transformer	Nos.	15	79,826	0.12
A2b.viii	11kV Metering Cubicle	Nos.	10	35,241	0.04
A2b.ix	33kV Metering Cubicle	Nos.	5	91,543	0.05

2.2.176 Further, Shri Ravi Sharma observed that huge quantity of CT/ PT are planned to be replaced. In comparison to their number of consumers in same voltage category. Most surprising fact is that NPCL is replacing even metering cubicles for 25 nos. of 11kV consumers and 5 nos. of 33kV consumers whereas metering cubicles life is more than 25 years unless these are damaged for power theft or third-class quality material is purchased by NPCL. Another infirmities by NPCL are revealed in the same annexure when once again metering equipment are shown to be purchased, ostensibly for improvement, but it is simply a replacement.

B6	Metering Activities				
	Upgradation of Meters and Associated equipments due to Technology Enhancement and improvement of Accuracy class		Quantity	Unit Rate	Total Rs. Cr
B6.i	HT Meter	Nos.	150	8,117	0.12
B6.ii	3 Phase 4 Wire LT Whole Current		1,500	11,130	1.67
B6.iii	1 Phase 2 Wire LT Whole Current	Nos.	5,000	2,362	1.18
B6.iv	11kV Metering Cubicle with instrument Transformer	Nos.	50	79,826	0.40
B6.v	33kV Metering Cubicle	Nos.	10	83,221	0.08
B6.vi	Modems		500	7,624	0.38
B6.vii	33 kV Metering with Composite CTPT & AMR		15	84,872	0.13
B6.viii	11 kV Metering with Composite CTPT & AMR	Nos.	25	39,949	0.10

B6.ix	Strengthening/Refurbishment of Meter Board Panel at Market / Authority Grp Housing	Nos.	100	40,000	0.40
B6.x	33kV Instrumentation Transformers		25	15,914	0.04
B6.xi	11kV Instrumentation Transformers		60	6,879	0.04
B6.xii	LTCT		150	19,446	0.29
B6.xiii	Multiple Metering Panel		10	1,60,000	0.16
	Sub-Total (B6)				5.00

2.2.177 Further, requested the Commission to call for details from NPCL regarding replacement of healthy metering cubicle with new one where cost shall be jumped up by 30-40%.

B. Petitioner's Response

2.2.178 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that the instrument transformers and meter cubicles play a crucial role in the metering installation for high-value HT (High Tension) consumers. It is essential to ensure that these components are maintained in optimal operating conditions. However, there are several reasons that can lead to the failure of metering components. For example, faults in consumer installations, inadequate maintenance of metering installations at consumer premises (such as water logging in the cable trench), and environmental factors like high moisture during the monsoon season can all contribute to instrument failure. In such cases, it becomes necessary to replace the faulty instruments with new materials in order to maintain a reliable and efficient metering system.

2.2.179 The Petitioner further stated that while meter cubicles are designed for long-term use, there are instances where replacement becomes necessary due to the deterioration caused by corrosive environments or high moisture content. Over time, these factors can lead to the degradation of the meter cubicle, potentially posing safety hazards or causing failures in the metering installation. Therefore, the replacement of meter cubicles is crucial to ensure safe and reliable operations. By replacing deteriorated meter cubicles, the metering installation can maintain its integrity and continue to function properly, minimizing the risks associated with compromised equipment.

2.2.180 The Petitioner also submitted that when an instrument transformer fails, it cannot be repaired or reused. Therefore, the only viable option is to replace the failed transformer with new equipment. The replacement process involves installing new material, which contributes to enhancing the overall lifespan and functionality of the metering installation. By replacing the failed instrument transformer with new equipment, the metering system can continue to operate efficiently and effectively, ensuring accurate measurement and reliable performance.

C. Commission's View

2.2.181 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner.

A. Comments / Suggestions of the Public

2.2.182 Shri Dr. Sukhram Pal (Sushant Ansal City) complaint about Non-conversion of Single-point connection to Multi-point connections and Levy & recovery of excess tariff by builder.

B. Petitioner's Response

2.2.183 As regards to complaint of the of Shri Dr. Sukhram Pal (Sushant Ansal City), the Petitioner submitted that vide its letter dated October 25, 2021 it had already intimated the Builder and the RWA about the deficiency in the Electrical infrastructure and advised to complete the pending installations/Electrical infrastructure so that the connection can be converted from single point to multi point.

2.2.184 Further, it is charging the Tariff strictly as per Tariff Rate Schedule, latest being July 20, 2022, approved by the Commission.

C. Commission's View

2.2.185 The above matter is not part of this proceedings and therefore there is no need to address the comments. However, the Commission has taken note of the objections/suggestions made by the stakeholder and the Petitioner's response.

A. Comments / Suggestions of the Public

2.2.186 Shri Vinay Kumar Gupta/ Mr. Khatri Ji/ Mr. Kapoor stated that the multipoint connection conversion should be implemented quickly.

B. Petitioner's Response

2.2.187 As regards to complaint, the Petitioner submits that it has asked the Consumers / Residents/ RWA / Builder multiple times (more than 3 times) to apply for individual connections and make payment of requisite charges thereof in order to install individual meters at the premises of each resident, but received no response

C. Commission's View

2.2.188 The Commission has taken note of the objections/suggestions made by the stakeholder and the Petitioner's response the Commission is of the view that the matter will be dealt separately in different proceedings.

A. Comments / Suggestions of the Public

2.2.189 M/s Bharti Airtel Limited submitted that the NPCL shall Levy and recover "Industrial Tariff" from telecom operator instead of levying "Non-Domestic Tariff".

B. Petitioner's Response

2.2.190 As regards to M/s Bharti Airtel Limited submission, the Petitioner stated that it is charging the Consumers strictly as per Tariff Rate Schedule which also categorise the consumer category, latest being July 20, 2022, approved by the Commission.

2.2.191 Applicability and determination of tariffs are the jurisdiction of the Commission and it may decide accordingly.

C. Commission's View

2.2.192 The Commission has taken note of the objections/suggestions made by the stakeholder and the response made by the Petitioner. If it is the policy matter, then they should approach the Petitioner and GoUP for proposals to be sent to the Commission.

MISCELLANEOUS

A. Comments / Suggestions of the Public

2.2.193 Representatives of Noida Entrepreneur Association (Small & Medium Industry) requested that the tariff for Industries should not be increased when all the neighbouring states has lower tariff. They also requested for lower rates for peak hours. Further they submitted that, uninterrupted power supply is very important as the raw material which is in process gets damaged due to interruptions and there should be a provision for penalty on distribution licensee for interruption of power supply.

B. Petitioner's Response

2.2.194 The Petitioner submitted that it has filed its Petition No. 1919 of 2022 for approval of Annual Revenue Requirement and Tariffs for FY 2023-24, Annual Performance Review for FY 2022-23 and Truing-up for FY 2021-22 for the kind consideration of the Commission and requested the Commission to take an appropriate view with regard to the Tariff to be charged by the Petitioner from the consumers for FY 2023-24.

2.2.195 The Petitioner further submitted that it is already supplying power to its Industrial and other urban consumers for almost 24 hours barring breakdown, transmission capacity constraints or force-majeure events and endeavors to provide uninterrupted power supply and better quality of service to all of its consumers. For specific complaints, the consumer is requested to kindly approach the company's helpline for the purpose.

C. Commission's Analysis

2.2.196 The Commission has taken note of the objections/suggestions made by the stakeholder and the response made by the Petitioner.

A. Comments / Suggestions of the Public

2.2.197 Shri J.S Rane, Chairman-Indian Industrial Association during the public hearing submitted that they have been facing interruptions in power supply. He further submitted that due to National Green Tribunal (NGT) guidelines, the use of DG genset is not permitted. He requested the following measures:

- Underground cabling for uninterrupted power supply even during windy climate.
- Separate Ring Main Unit(RMU) for each industry so that if there is fault in single consumer entire block power supply will not get disrupted.
- Industrial consumers should be excluded from taking Temporary connections under LMV-9 and LMV-6 load shall be increased from 50KW to the 75KW.
- No increase in Tariff and continue with Regulatory Discount of 10%.
- Ease in receiving discount in Regulatory Surcharge i.e., refund of Electricity Duty should be simple and procedure for getting New Connection/ Load enhancement.
- In case a Cheque is dishonoured a single time in a Financial Year, the Consumer is not allowed to deposit his electricity bill through Cheque.

B. Petitioner's Response

2.2.198 The Petitioner submitted that they are already supplying power to its Industrial and other consumers for almost 24 hours barring breakdown, transmission capacity constraints or force-majeure events and further endeavors to provide uninterrupted power supply and better quality of service to all of its consumers.

2.2.199 In the residential areas, the initial LT network which is largely overhead is developed by the Local Area Development Authority and handed over to it. Based on the performance of network, recurrence of faults and interruption analysis, wherever feasible, the Company is converting the overhead network into underground network. The Petitioner further submitted that it has in its capital expenditure proposed for FY 2023-24 has proposed all its new network as underground instead of overhead.

2.2.200 The Company has been installing RMU for all its new consumers with large loads. With respect to existing consumers, consumers are classified into clusters and connected through RMU in order to minimise interruptions and shut down interventions. Nevertheless, installation of separate RMU for each industry having variety of load is not always financially viable.

2.2.201 The Petitioner further submitted that it has filed its petition no 1919 of 2022 for approval of Annual Revenue Requirement and Tariffs for FY 2023-24, Annual Performance Review for FY 2022-23 and Truing -up for FY 2021-22 for the kind consideration of the Commission and requests the Commission to take an appropriate view with regard to the Tariff to be charged from the consumers for FY 2023-24.

2.2.202 The Petitioner also submitted that the refund of Electricity Duty is under the purview of the Government of State of Uttar Pradesh and is extending all possible help and support to consumers to fasten the process.

2.2.203 And submitted it strictly follows the procedures and provisions of Electricity Supply Code 2005 while giving new connection or at the time of enhancement of load.

2.2.204 The Petitioner submitted that dishonor of Cheque is a punishable offense under the Negotiable Instrument Act, 1881. In order to curb the malpractices it promote digital payments and instill discipline amongst the consumers, it requests its consumers to deposit bills via online / DD in case of dishonor of cheque.

C. Commission's Analysis

2.2.205 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner.

A. Comments / Suggestions of the Public

2.2.206 Shri Om Dutt Chauhan, District President, Bhartiya Kisan Lok Shakti informed that the electricity connections are not being given in Doob area.

B. Petitioner's Response

2.2.207 The Petitioner submitted that, as per sub-clause (a)(ii) of Regulation 4.4 of The Electricity Supply Code, 2005, for the purpose of providing new connection, a consumer is required to submit a self-attested true copy of Approval/NOC/Permission of the local authority. Further, GNIDA vide its letter dated September 21,2022 directed the company to not to provide any new connection without NOC approval from GNIDA. Accordingly, it requests the same from the applicant before providing new connections which is one of the required documents.

C. Commission's Analysis

2.2.208 The Commission has taken note of the objections/suggestions made by the stakeholder and the response made by the Petitioner.

A. Comments / Suggestions of the Public

2.2.209 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that NPCL has not provided any impact of EV and Battery Storage as mentioned in Regulations 14.2 L of MYT Tariff Regulations 2019. Bidding has been conducted for Battery Storage Power and NPCL should explore to contract this power from SECI, New Delhi.

B. Petitioner's Response

2.2.210 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that the Commission vide Order dated 22.11.22 has restrained the company from entering into LTPPA beyond Jun 2029. The Company has filed a review petition of 'Business Plan Order' dated 22.11.2022 to allow the Company to tie up LTPPA power. Also, in the petition the Company has submitted the details of an application regarding tie up of LTPPA power from the Solar Wind hybrid power along with Energy Storage System through SECI. Necessary action will be taken upon receiving the suitable direction from the Commission.

C. Commission's View

2.2.211 The Commission has taken note of the objections/suggestions made by the stakeholder and response made by the Petitioner.

A. Comments / Suggestions of the Public

2.2.212 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that Demand Side Management (Ref: deficiency I &II file no annexure II) As per summary approx. 1.75% ie. 43.57 MU unit are booked in DSM for which average bill is Rs 5.62 per kWh. However, scrutiny of data shows that there has been poor performance which has resulted into heavy DSM charges. In line with Regulation 14(7) (a) MYT Regulations 2019, the allowance to NPCK should be fixed onto highest Merit Order Dispatch power under Long term / Medium Term contracts.

Bill Details	Schedule Drawal (kWh)	Actual Drawal (kWh)	Deviation (kWh)	Total UI Amount (including Sign Change charges)	Average DSM Charges Rs / kWh
	4,86,51,630	4,87,31,547	79,917	4,74,000	5.93113
	4,50,19,648	4,50,32,358	12,710	21,11,812	166.152
1829/SEEA/ EEIII/ DSA/NPCL dated 29/07/2021	5,45,25,958	5,46,75,298	1,49,341	14,58,833	9.76848
2151/SEEA/ EEIII/ DSA/NPCL dated 03/09/2021	5,95,43,568	5,98,58,158	3,14,590	31,10,050	9.88603
	6,00,21,695	6,02,44,277	2,22,582	34,84,612	15.6554
	5,25,23,433	5,28,48,952	3,25,520	31,03,272	9.53329
2875/SEEA/ EEIII/ DSA/NPCL dated 27/11/2021	5,49,79,103	5,71,11,601	21,32,498	2,52,68,644	11.8493
	4,55,00,495	4,85,66,204	30,65,709	3,20,46,482	10.4532
	4,48,96,140	4,53,36,897	4,40,757	40,57,597	9.20597
	4,12,07,185	4,28,23,484	16,16,299	1,37,39,711	8.50072
1345/SEEA/ EEIII/ DSA/NPCL dated	3,17,63,618	3,25,05,268	7,41,650	60,73,254	8.18884

24/05/2022					
	53,86,32,470	**54,77,34,043**	**91,01,573**	**9,49,28,267**	**10.4299**

2.2.213 Since data is available for average monthly bills, comments can only be provided for monthly data, however, it is kindly requested that principle be made applicable in every time block manner for allowance of DSM charges.

2.2.214 It is pertinent to mention that NPCL has deployed lots of Capex in Control Room infrastructure and consumer cannot be penalised by allowing both Capex and poor performance.

2.2.215 NPCL may be sensitised to provide trained and experienced manpower to manage the control room to avoid repetition of such poor performance in following years.

B. Petitioner's Response

2.2.216 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that in the ARR Petition No. 1919 of 2022, it is highly uncertain or in-fact not feasible to exactly estimate the day-ahead power requirement as the demand is highly volatile, uncertain and dependent on a number of factors which are beyond the control of the Company e.g. volatile weather conditions, long intermittent holidays on account of various festivals, Govt. holidays etc. There can be certain time-blocks wherein the power tied-up may remain unutilised and thus, need to be settled in accordance with the DSM Regulations as per the rates prevailing in the power exchange during that particular time-block and respective frequency. Further, the Company has procured power from real-time market as well, however, at times it is not possible to accurately estimate the exact power requirement as the demand is highly volatile, uncertain and dependent on a number of factors which are beyond control as explained here-in-below: -

a) Uncertain Demand: As mentioned in Appendix III to our Petition No.1919 of 2022, we once again submit that it is highly uncertain or in-fact not feasible to exactly estimate, even on day-ahead basis, the power requirement in exact quantum as the demand is highly volatile, uncertain and dependent on a number of factors which are beyond the control of the Company e.g. sudden outages of Generating or Distribution systems, volatile weather conditions, long intermittent holidays on account of various festivals, Govt. holidays etc. There can be certain time-blocks wherein the power tied-up may remain insufficient to meet the demand / excess as compared to load drawn and hence, unutilised which is being settled under DSM mechanism.

Due to the above uncertainty, the Central Commission has notified DSM Regulations for the accounting of such deviations. Even, the MYT Regulations 2019 duly acknowledges the power drawl under DSM mechanism and allows variations upto 10% of the total power procurement.

Further, in accordance with the above-mentioned regulations, both under-drawl and over-drawl of power need to be governed for meeting the mandatory sign change requirement as per DSM Regulations of Central Commission. As per DSM Regulations of Central Commission, the Company is required to change its sign of drawl after every 6 time-blocks or by remaining in the range of +/- 20 MW with reference to its schedule to avoid sign change charges.

b) Increase in Demand volatility due to RE Power: Further, it is pertinent to mention here that the Company has tied up 90 MW power from Renewable Sources viz. 32 MW from Wind and 58 MW from Solar apart from almost 24 MW from Roof-top Solar connections. Also, the Company has already granted Open Access for 32 MW capacity who are sourcing power from Solar Sources and many more consumers are in the process of arranging cheaper power from renewable sources. All this has further aggravated the uncertainty in the actual flow of power vis-à-vis scheduled power resulting into increased volume of such variations being settled under DSM mechanism.

c) Procurement through RTM : As directed by the Hon'ble Commission, the Company has taken various initiatives including participation in Real-time IEX platform which started its operations w.e.f. 01.06.2020. the Company has procured power from RTM of IEX which is being included under total procurement from IEX in Form no. F-13M(ii). In this regard, it is pertinent to mention that scheduling of power from IEX-RTM ideally takes 1.15 Hrs from the time of bidding apart from another 15-30 minutes for planning and bid formulation etc. For example, if a bid is placed at 22:45 Hrs. for purchase of power it will get dispatched from 00:30 Hrs. For such period before commencement of scheduling, the Company has no other option but to avail power from DSM to manage its distribution system. Further, adequate power in the RTM market is also not available many times for various reason e.g. lack of sufficient seller, IT/ technical reasons on IEX Platform etc. leading to variation in schedule vis-à-vis actual drawl."

2.2.217 Therefore, there are time-blocks wherein the power tied-up may remain unutilised and thus, need to be sold on Power Exchanges. Similarly, at times, the Company may over-draw power within safe limits as provided in the DSM Regulations.

2.2.218 The Petitioner submitted that MYT Regulations, 2019 also provides for power drawl under DSM mechanism to be pass through as may be seen from the extract of the Regulation 14.7 of the MYT Regulations, 2019 provided below:

"14.7 In the regime of Availability Based Tariff (ABT), the cost of power purchase through Deviation Settlement Mechanism (DSM) shall be allowed to be passed through in Tariff of the subsequent year subject to the following condition:

(a) The Average rate for power purchased through DSM should not exceed the maximum rate for power purchased under the Merit order of the licensee as approved by the Commission.

(b) <u>The total cost of Electricity units purchased through DSM shall be restricted to 10% of total power purchase cost approved by the Commission"</u>

2.2.219 In view of the above, it is submitted that Commission may kindly consider the fact that a Distribution Licensee procures power as per load forecasting which is bound to be in variance of actual load drawn by the consumers on real time basis, therefore, the net Over-drawl of 41.21 MU with cost of Rs. 28.11 Cr. being only 1.89% of overall power purchase cost for FY 2021-22 as against the limit of 10% stipulated in Regulation 14.7 and was beyond the reasonable control of the Company.

2.2.220 The Petitioner further submitted that the average cost of power from DSM at Rs. 6.82 per unit is quite competitive considering the weighted average power procurement cost from exchange at Rs. 6.22 per unit and from DEEP portal at Rs.6.55 per unit, especially considering the fact that most of the drawl / overdrawl under DSM will happen during high frequency / peak hours.

2.2.221 With regard to the data submitted in the letter of the Objector, the Company is not able to verify the data source and basis of the same and therefore, unable to comment on it.

C. Commission's View

2.2.222 The Commission has taken note of the objections/suggestions made by the stakeholder and the response made by the Petitioner.

A. Comments / Suggestions of the Public

2.2.223 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that as per MYT Regulations 2019 all consumers were to metered by March 31, 2021 but Noida Power Company Limited has shown a total of 2074 unmetered consumers and hence deemed revenue towards such consumer needs to be computed by the Commission.

B. Petitioner's Response

2.2.224 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that the Company already has converted 97.9% of its consumers into metered consumers as on March, 2022. Though unmetered consumers constitute 2.1% in terms of numbers but in terms MUs and Revenue, the same is at 0.59% and 0.18% respectively. While the Company is fully geared up to install meters for all the remaining consumers, which are in the rural areas, however, due to stiff resistance and undue pressure, meters could not be installed. In many cases the meters installed were forcibly removed / damaged by the consumers.

2.2.225 It is further stated that in case of LMV-1 and LMV-5, unmetered sales are accounted based on consumption pattern / use of the electricity in the concerned area. It is also pertinent to mention that there are 118 villages in Company's licensed area, which also has lot of migrant labour/ encroachers who often found indulging into theft of electricity. Apart from the above due to ongoing development activities, in many cases, the land though acquired by GNIDA, but continue to be utilised for farming activities by encroachers/ earlier occupants and indulge into pilferage of power, therefore, in order to curb theft of power and T&D Losses, the Company regularly conducts loss control drives in these areas to remove unauthorized tapings as well as recovery of sales through assessment under Section 126 read with 135 of the Act for unauthorized use/theft of Electricity which otherwise could not be accounted for. The amount so recovered against such cases is being accounted under the same category. Since, these are unauthorized connections, the amount assessed and recovered against electricity theft from such consumers under Section 126 read with 135 of the Act do not get reflected in the number of consumers and their consumption when computed on the basis of only authorised consumer numbers and connected load as mentioned in the forms prescribed by the Hon'ble Commission. It is pertinent to mention here that such assessed and recovered amount is also included in the sales of LMV-1 and LMV-5 categories which the Hon'ble Commission has been wrongly considering as "Excess Sales".

2.2.226 The Company has given detailed submission on the unmetered sales in its ARR Petition No. 1919 of 2022 which may kindly be considered.

2.2.227 With regard to 100% metering, the Company would like to bring to the attention of the Hon'ble Commission, that the Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021 specifies the targets for metering of consumer as under:

Consumer Metering:

FY 2022-23: - 98%

FY 2023-24: - 99%

Functional Metering:

FY 2022-23: - 93%

FY 2023-24: - 96%

FY 2024-25: - 98%

2.2.228 Thus, the BEE has also envisaged that there will be some number of unmetered consumers in the system.

C. Commission's View

2.2.229 The Commission has taken note of the objections/suggestions made by the stakeholder and the response made by the Petitioner. Further, the Commission has dealt the issue in the Energy balance and Distribution loss section of the Tariff Order.

A. Comments / Suggestions of the Public

2.2.230 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted pertaining to Employee Cost and Professional fee that as per Tariff Order of previous year and matter raised by Consumer Representative in hearing, it has come to knowledge that NPCL was paying approx. Rs. 6.0/- Crore to its Managing Director, though, after tough positioning by the Commission, it has been informed that the said Managing Director has been removed from the board of the Company. We have nothing to say about the illegitimate practices by him, as alleged by the consumer representatives, however, the opaque procurement process and excessive cost of projects purchased as appear in FAR, indicates that many employees might be engaged with him.

2.2.231 Further, NPCL has stated in previous tariff order that it has paid legal fee of Rs 3.0 Cr to Khaitan Law firm whereas Sh Pradip Khaitan is on board of CESC Limited (https://www.cesc.co.in/boardOfDirectors). NPCL need to avoid such payments to “associated person/entity”.

2.2.232 Although, NPCL is in its right to give extra ordinary salaries to its employees, however, under prudence check of expenses, its not only right but also duty of Hon’ble Commission to check veracity of such expenses. It may call a data to study expenses on salaries by PVVNL in similar areaof NPCL i.e. Noida, or from NDPL New Delhi. It is also necessary to know by Hon’ble Commission that salaries in general, in private power Discoms, have been stabilised. NPCL must provide data that how many employees are paid salary more than Rs. 50 lac, More than Rs. 75 lac and More than Rs. 100 Lac as CTC.

2.2.233 NPCL may also use Opex in metering, billing and collection. It must use Cloud services instead of own physical servers.

B. Petitioner’s Response

2.2.234 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that It is submitted that time and again the Company has demonstrated that its O & M Expenses comprising of salaries, repair and maintenance expenses, administration and general expenses including legal and professional charges are most competitive not only with State Distribution Companies but also with other private leading Distribution Companies across the country. It is submitted that the remuneration of KMPs and other senior management officials is decided strictly as per the policy and provisions of the Companies Act 2013 with due approval of the Board and Shareholders of the Company.

2.2.235 It is also submitted that on various occasion the Company has demonstrated that its O&M Expenses comprising of salaries, repair and maintenance expenses, administration and general expenses including legal and professional charges are most competitive not only with State Distribution Companies but also with other leading Private Distribution Companies across the country. The following Table depicts the computation of per unit Employee Expenses of the Company and other surrounding Distribution Companies which the objector has referred to:

DISCOMs	Employees Expenses (Rs./Crore)	Sales (MUs)	Emp Exp./per unit sale (Rs./kWh)
FY 2020-21			
BRPL	564	11077	0.51
BYPL	393	6960	0.57
TPDDL	557	8310	0.67
FY 2021-22			
KeSCO	128	3397	0.38
NPCL	59	2338	0.25

2.2.236 It is evident from the above Table that while comparing the Company's Employee Expense per unit of Sale with KeSCO, the Employee Expenses of the Company is lower by 67% than that of KeSCO which is a distribution Company of almost a similar size that of the Company. The Employee Expenses per unit of sale of the Company is lower by 101%, 123% and 164% when compared with other Distribution Companies in Delhi NCR region i.e. BRPL, BYPL and TPDDL.

2.2.237 Further, UPPCL cannot be compared with NPCL due to its large size.

2.2.238 Further, it is evident from the above Table, that the per unit Employee Expenses of the

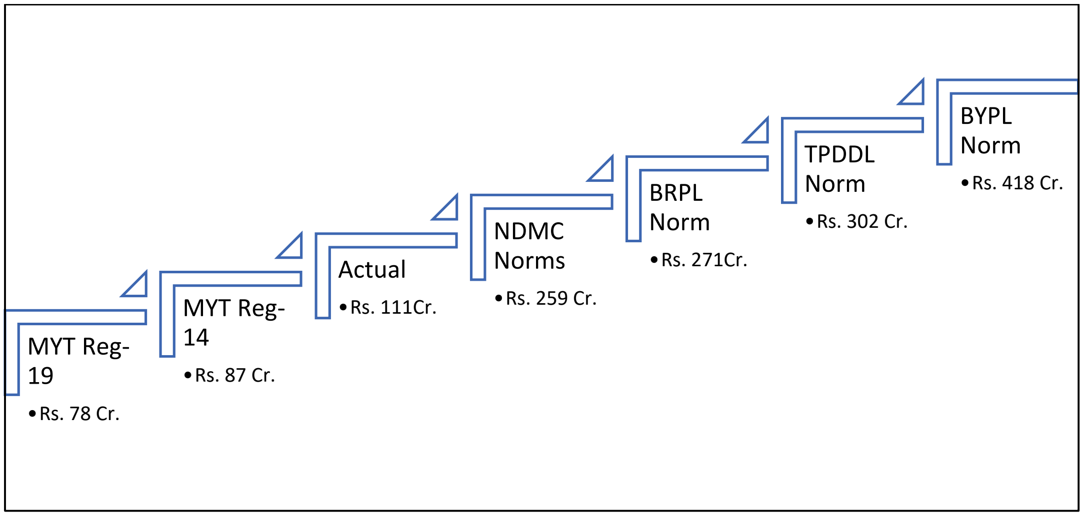
Company is lower by almost 129% on an average in comparison to the Delhi Distribution Company. It is pertinent to mention herein that the Company is operating in the Delhi NCR region, hence, it will be more appropriate and prudent to compare the Cost of Expenditure towards Employee, R&M and A&G with Delhi Discoms as well.

2.2.239 Also, the CEA has recently published a report on "Guidelines for Benchmarking of Operation & Maintenance (O&M) Norms for Distribution Utilities 2023", in which it provides the all India average Emp cost expenses in % of total O&M Expenses. The company has compared the same with NPCL exp as given below

FY	Discoms	%age of Total O&M cost w.r.t Total Expenses of Discoms	%age of Employee Cost within total O&M Expenses
FY 2021-22	State Discoms	12.65%	73.46%
	Private Discoms	14.59%	56.35%
	All India Avg	**12.76%**	**72.30%**
	NPCL - Approved by the Commission in ARR of FY 2021-22	4.94%	28.37%
	NPCL - Claimed by NPCL in True-Up of FY 2021-22	6.43%	45.98%

2.2.240 It can be observed form above tables in which NPCL data is extrapolated, the % of O&M Expenses w.r.t to total expenses and % of Employee Cost within total O&M Expenses of NPCL (Both Submitted and Approved) is far less than the actual numbers provided by CEA for Private DISCOMs and State DISCOMs.

2.2.241 The following table comprises of O & M Costs for FY 2019-20 computed in accordance with the normative parameters allowed for TPDDL, BRPL, BYPL and NDMC as per DERC Distribution Tariff Regulations 2019 vis-à-vis the O & M Expenses allowed to the Petitioner Company as per MYT Regulations 2019, MYT Regulations 2014 and Actual O & M Expenses: -



2.2.242 From the above, it is evident that that even normative expenses allowed to Delhi Distribution Companies are more than 2.5 times of actual expenses of the Company and almost 4 times of O & M Expenses allowed under MYT Regulations 2019 leave aside actual expenses of Delhi Discoms. The Petitioner Company has been repeatedly requesting the Commission to set O & M Norms for the Company on realistic basis so that it can provide the best of class services to its consumers and also do not suffer very high disallowances going out of its Return on Equity.

2.2.243 Despite the above, it is also pertinent to mention here that the Hon'ble Commission has been approving the O & M Expenses on normative basis in accordance with the MYT Regulations 2019 / MYT Regulations 2014 only ignoring the actual expenses of the Company.

C. Commission's View

2.2.244 The Commission has taken note of the objections/suggestions made by the stakeholder and the Petitioner's response. These expenses are part of A&G expenses for which norms have been made and therefore these expenses are not made part of ARR.

INTEREST COMPUTATAION

A. Comments / Suggestions of the Public

2.2.245 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that in respect of interest computation followings be considered:

- **Interest on Long term:** NPCL has actually not submitted any project or scheme which is 100% complete in one year. For example, it has shown land in one year, boundary wall in another year, construction in another year and so on so forth. Accordingly, the Commission has to obtain detail of entire project as a whole and capitalisation be allowed when entire project is commissioned. In the past, Hon'ble UPERC has disallowed capitalisation of land in this respect. Hon'ble UPERC is also not made aware of delay or excessive interest payments etc. Unless, complete details as cumulative project along with timeline is not made available, Long term interest be not allowed to Discom.

- **Interest on Security Deposit of Consumer:** Discom has, as seen in last tariff order, refunded security in last month of FY fully aware of fact that UPERC only consider April and March data to average out for determination of interest. In this process approx. Rs. 2.5 Cr, as per our computation, is loss to consumers. It is requested that average of 12 months be taken by summation of Security Deposit of each month last day and then divided by 12.

- **UPPCL security:** No impact be made available towards amount held by UPPCL as it is dispute between two licensee and UPPCL claiming it to be payment security mechanism towards electricity it supplied to NPCL till 2013-14.

B. Petitioner's Response

2.2.246 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that with reference to the capitalisation of land, Substation and associated costs as observed by the Objector, it is submitted that the Commission vide its various Tariff Orders recent being order 20.07.2022 approved the Company's Petition No. 1797 / 2021 for True-up of FY 2020-21 and ARR for FY 2022-23, wherein it carried disallowances which are not as per the prevailing Regulations and past practices. Aggrieved by the aforesaid order, the Petitioner Company filed an Appeal bearing No. 398 of 2022 before the Hon'ble APTEL on

12.09.2022 against the above order

2.2.247 Pending the adjudication of the aforesaid appeal and other appeals relating to the impugned methodology adopted by the Hon'ble Commission for calculation of GFA of FY 2020-21 and 2022-23, the Closing GFA of FY 2020-21 and Opening GFA of FY 2021-22 has been computed as per the methodology followed by the Hon'ble Commission in its tariff order dated 03.09.2019 with GFA bases as per the Company's submissions for Truing up of ARR for FY 2021-22.

2.2.248 The Petitioner states that interest on Consumer Security Deposit is computed on outstanding balance of each individual customer for the period during which their security deposit was available with the Company and such computation is done in the ERP System of the Company (viz. SAP) automatically without any human intervention. The same is actually paid to the consumers and claimed by the company. The Hon'ble commission in its previous orders has approved the actual interest on security deposit paid after all the due analysis.

2.2.249 Also, it is pertinent to mentioned that the Company refunds the security deposit only in case of Permanent Disconnection in accordance with the provisions of Electricity Supply Code, 2005.

2.2.250 During FY 2021-22, the Commission while approving the Cost Data Book has reduced the quantum of Consumer Security Deposit (CSD) from 60 days to 45 days and accordingly, in compliance to the direction of the Hon'ble Commission, the Company at the time of annual assessment of CSD in accordance with the provisions of Electricity Supply Code 2005 has refunded the amount of Security Deposit to align the same equivalent to 45 days sales.

2.2.251 The Petitioner submitted that Company has paid Rs. 19.64 Cr to Uttar Pradesh Power Corporation Limited [hereinafter referred to as 'UPPCL'] which has been claimed in the ARRs from time to time. In addition to the above, the Company has also made on account payment of Rs. 10 Cr to UPPCL in pursuance to the directions of the Hon'ble Commission and the Hon'ble Allahabad High Court, which has not been claimed in the ARRs since the said matter is pending adjudication before the Hon'ble Supreme Court.

C. Commission's View

2.2.252 The Commission has taken note of the objections/suggestions made by the stakeholder and the Petitioner's response.

A. Comments / Suggestions of the Public

2.2.253 Shri Ravi Sharma, Advocate, on behalf of Public Policy for Public (PPP) submitted that Files of Deficiency Note IV and V cannot be open as these are removed by NPCL as message appears on website, so comments have not included any explanation done in these notes

B. Petitioner's Response

2.2.254 As regards to the objection of Shri Ravi Sharma, the Petitioner submitted that even today the complete petition including the reply to Deficiency Note IV and V can be downloaded from the Company's website. The due compliance of successfully uploading of the files has been submitted by the Company to the Commission vide letter no. P77A/2023/080 dated March 03, 2023.

C. Commission's View

2.2.255 The Commission has taken note of the objections/suggestions made by the stakeholder and the response of the Petitioner.

3 INDEPENDENT AUDIT FOR FY 2021-22

3.1.1 As regards the demand of the stakeholders for a Comptroller & Auditor General (CAG) Audit or any third-party audit, the Commission in its Tariff Order for FY 2014-15 had directed the Petitioner that from FY 2014-15 onwards it should get its accounts audited by an independent auditor. Such auditor should be appointed with the prior approval of the Commission. Apart from auditing of the financial accounts, the power purchase and the energy sales of the Licensee should also be audited on the regular basis so that deficiencies, if any, can be identified and removed. In accordance with this Commission vide Appointment Letter No UPERC/Director (Tariff)/2022-700 dated August 31, 2022 appointed an independent auditor M/s. Avanish K. Rastogi & Associates (hereinafter referred to as 'auditor').

3.1.2 Based on the comments on the draft report submitted by the Auditor to the Commission, the final report was submitted by the Auditor vide email dated May 19, 2023.

3.1.3 The main observations made in the report are being discussed in the following paras, which covers the following aspects:

1. Audit of Energy Sales
2. Audit of Power Purchase
3. Other critical factors affecting the approved ARR
4. Audit of Financial Accounts with special emphasis to ARR
5. Any other matter/issue which the Commission directs to scrutinise.

3.1.4 Major observations by the Auditor in the Report are as discussed below:

1. Energy Sales

Bills for energy sales are raised by NPCL as per rates approved by UPERC. The company uses various application for taking meter reading of consumers i.e. AMR, BLE, CMRI, Mobile App and Bills are raised by ERP system (SAP) as per meter reading obtained at each billing cycle except for few cases of rural area consumer, defective meter etc.

a. Comparison of Approved no of consumers with Actual number of Consumers:

Category wise details of number of Approved consumers and actual consumer as given below:

Sl No	Category	Approved Consumer	Actual Consumer	Variation	Variation %
1	LMV-1: Domestic Light, Fan & Power	1,44,719	1,06,390	-38,329	-26.49%
2	LMV-2: Non-Domestic Light & Fan & Power	4,667	3,649	-1,018	-21.81%
3	LMV-3: Public Lamps	297	412	115	38.72%
4	LMV-4: Institutions	535	526	-9	-1.68%
5	LMV-5: Private Tube Wells	1,308	1,053	-255	-19.50%
6	LMV-6: Small and Medium Power	3,743	3,494	-249	-6.65%
7	LMV-7: Public Water Works	257	261	4	1.56%
8	LMV-8: STW and Pumped Canals	8	8	0	0.00%
9	LMV-9: Temporary Supply	694	837	143	20.61%
10	LMV-11: Electric Vehicle Charging	129	0	-129	-100.00%
11	HV-1: Non-Industrial Bulk Power	251	225	-26	-10.36%
12	HV-2: Large and Heavy Power	939	898	-41	-4.37%
	Total	**1,57,547**	**1,17,753**	**-39,794**	**-25.26%**

- Overall consumers are 25.26 % less than the approved consumers.
- There is negative variance in case of LMV 1, LMV 2, LMV 4, LMV 5, LMV 6, LMV 11, HV 1 & HV 2.
- Actual consumers are more than approved consumers in case of LMV 3, LMV 7 and LMV 9.

b. Comparison of Approved Vs Actual Load

Comparison of category wise connected load and Actual Load is given below

Sl No	Category	Approved Connected Load (MW)	Actual Connected Load (MW)	Variance (Mw)	Variance %
1	LMV-1: Domestic Light, Fan & Power	564.26	510	-54.26	-9.62%
2	LMV-2: Non-Domestic Light & Fan & Power	38.43	33	-5.43	-14.13%
3	LMV-3: Public Lamps	**11.15**	**12**	**0.85**	**7.62%**
4	LMV-4: Institutions	7.05	7	-0.05	-0.71%
5	LMV-5: Private Tube Wells	6.47	5	-1.47	-22.72%
6	LMV-6: Small and Medium Power	87.66	83	-4.66	-5.32%
7	LMV-7: Public Water Works	**9.97**	**12**	**2.03**	**20.36%**
8	LMV-8: STW and Pumped Canals	0.10	0	-0.10	-100.00%
9	LMV-9: Temporary Supply	19.04	19	-0.04	-0.21%
10	LMV-11: Electric Vehicle Charging	10.07	0	-10.07	-100.00%
11	HV-1: Non-Industrial Bulk Power	135.21	120	-15.21	-11.25%
12	HV-2: Large and Heavy Power	492.39	449	-43.39	-8.81%
	Total	**1,381.80**	**1,250.00**	**-131.80**	**9.54%**

- Actual load is 9.54% below the approved load.
- Connected load in each category is less than approved load except for LMV 3 and LMV 7 where actual load are higher than approved load.

c. **Comparison of Approved Rates Vs Actual Rate:** Details of category wise approved ABR and Actual ABR is given below

Sl No	Category	Approved ABR (Rs / Kwh)	Actual ABR (Rs /Kwh)	Variance	Variation %
1	LMV-1: Domestic Light, Fan & Power	7.43	6.69	-0.74	-10.02%
2	LMV-2: Non-Domestic Light & Fan & Power	8.45	11.31	2.86	33.81%
3	LMV-3: Public Lamps	8.56	9.34	0.79	9.18%
4	LMV-4: Institutions	10.13	8.65	-1.48	-14.58%
5	LMV-5: Private Tube Wells	1.07	2.52	1.46	136.53%
6	LMV-6: Small and Medium Power	9.94	10.29	0.35	3.51%
7	LMV-7: Public Water Works	9.93	11.12	1.18	11.92%
8	LMV-8: STW and Pumped Canals	12.22	35.00	22.78	186.36%
9	LMV-9: Temporary Supply	10.54	12.42	1.88	17.84%
10	LMV-11: Electric Vehicle Charging	7.23	-	-7.23	-100.00%
11	HV-1: Non-Industrial Bulk Power	9.93	11.00	1.07	10.75%
12	HV-2: Large and Heavy Power	8.22	8.28	0.07	0.80%
	Total	**8.28**	**8.30**	**0.01**	**0.15%**

- Overall ABR is 0.15 % higher than approved rates particularly in case of LMV 5 and LMV 8 where ABR are higher than actual by 136.53 % and 186.36 % respectively. Checking of bills on sample basis revealed that ABR are high as bills primarily comprises of fixed charges & low consumption of energy units.
- ABR is below the approved rate in case of LMV 1, LMV 11 and LMV 4.

d. Unmetered Connection: Status of unmetered connection of last 3 years is as under:

Particular	2021-22	2020-21	2019-20	2018-19
Domestic (LMV-1)	**2074**	**2141**	**2208**	**2426**
Converted to Metered (Nos)	67	67	218	

Converted to Metered (%)	3.13%	3.03%	8.99%	
Private Tube Wells (LMV-5)	**416**	**662**	**691**	**706**
Converted to Metered (Nos)	246	29	15	
Converted to Metered (%)	37.16%	4.20%	2.12%	
Total Unmetered	**2490**	**2803**	**2899**	**3132**

- From the above table it was observed that total unmetered connections in 2021-22 have reduced to 2490 from 2803 in 2020-21 i.e. reduction of 11.16% over the previous year. However, there is no significant improvement in LMV -1 Category.

- Total unmetered connections stand at 2.11% of total consumers. In this regard it is pertinent to mention that **section 55 of electricity act 2003- Use, etc., of meters -** stats that

"…..(1) No licensee shall supply electricity, after the expiry of two years from the appointed date, except through installation of a correct meter in accordance with the regulations to be made in this behalf by the Authority:
PROVIDED that *the licensee may require the consumer to give him security for the price of a meter and enter into an agreement for the hire thereof, unless the consumer elects to purchase a meter:*
PROVIDED FURTHER that *the State Commission may, by notification, extend the said period of two years for a class or classes of persons or for such area as may be specified in that notification.*
(2) For proper accounting and audit in the generation, transmission and distribution or trading of electricity, the Authority may direct the installation of meters by a generating company or licensee at such stages of generation, transmission or distribution or trading of electricity and at such locations of generation, transmission or distribution or trading, as it may deem necessary.
(3) If a person makes default in complying with the provisions contained in this section or the regulations made under sub-section (1), the Appropriate Commission may make such order as it thinks fit for requiring the default to be made good by the generating company or licensee or by any officers of a company or other association or any other person who is responsible for its default. ……….."

In this context it is suggested that unmetered connections should be converted to metered connection as expeditiously as possible for adherence to the aforesaid provisions and to ensure control and reduction of distribution losses.

e. Comparison of Category wise approved Sales (MU), Revenue and Rates with actual figures for 2021-22

Amount in Rs. In Crore

Sl No	Category	Approved			Actual			Variations					
		Sales (MU)	Revenue	ABR (Rs / Kwh)	Sales (MU)	Revenue	ABR (Rs /Kwh)	sales (MU)	%	Revenue	%	Rate	%
1	LMV-1: Domestic Light, Fan & Power	767.63	570.63	7.43	694.48	464.53	6.69	-73.15	-9.53	-106.1	-18.59	-0.74	-10.02
2	LMV-2: Non-Domestic Light & Fan & Power	50.71	42.87	8.45	41.45	46.89	11.31	-9.26	-18.26	4.02	9.38	2.86	33.81
3	LMV-3: Public Lamps	37.52	32.11	8.56	37.35	34.9	9.34	-0.17	-0.45	2.79	8.69	0.79	9.18
4	LMV-4: Institutions	19.95	20.21	10.13	12.25	10.6	8.65	-7.7	-38.60	-9.61	-47.55	-1.48	-14.58
5	LMV-5: Private Tube Wells	25.49	2.72	1.07	14.58	3.68	2.52	-10.91	-42.80	0.96	35.29	1.46	136.53
6	LMV-6: Small and Medium Power	112.72	112.02	9.94	100.7	103.59	10.29	-12.02	-10.66	-8.43	-7.53	0.35	3.51
7	LMV-7: Public Water Works	25.13	24.96	9.93	24.91	27.69	11.12	-0.22	-0.88	2.73	10.94	1.18	11.92
8	LMV-8: STW and Pumped Canals	0.09	0.11	12.22	0.06	0.21	35.00	-0.03	-33.33	0.1	90.91	22.78	186.36
9	LMV-9: Temporary Supply	44.8	47.2	10.54	45.96	57.06	12.42	1.16	2.59	9.86	20.89	1.88	17.84
10	LMV-11: Electric Vehicle Charging	5.48	3.96	7.23	0	0	-	-5.48	-100	-3.96	-100	-7.23	-100
11	HV-1: Non-Industrial Bulk Power	319.98	317.75	9.93	216.13	237.7	11.00	-103.85	-32.46	-80.05	-25.19	1.07	10.75

Sl No	Category	Approved			Actual			Variations					
		Sales (MU)	Revenue	ABR (Rs / Kwh)	Sales (MU)	Revenue	ABR (Rs /Kwh)	sales (MU)	%	Revenue	%	Rate	%
12	HV-2: Large and Heavy Power	1,064.07	874.47	8.22	1,150.17	952.8	8.28	86.1	8.09	78.33	8.96	0.07	0.80
	Total	**2473.57**	**2049.01**	**8.28**	**2338.04**	**1939.65**	**8.30**	**-135.53**	**-5.48**	**-109.36**	**-5.34**	**0.01**	**0.15**

- ABR is higher than Approved ABR by 0.15% , whereas nos of consumers are 25.26% below the approved consumers,
- Sales units are 5.48% below the approved quantity and revenue is 5.34% below the approved revenue.

2. **Distribution Losses:** Statement of distribution losses as compared to approved losses are given below:

Year	Approved Losses	Actual	Variance%
2014-15	8%	8.10%	1.25%
2015-16	8%	8.04%	0.50%
2016-17	8%	8.01%	0.13%
2017-18	8%	7.99%	-0.13%
2018-19	8%	8.15%	1.88%
2019-20	8%	8.23%	2.88%
2020-21	7.92%	8.39%	5.93%
2021-22	7.80%	7.95%	1.92%

a. Actual distribution losses at 7.95% are higher than approved losses by 1.92%. However, losses have reduced as compared to previous years.

b. *Some of the observations noted from energy audit report of the company are as under:*
   - *NPCL is not maintaining feeder wise losses for all the feeders. However, they are maintaining voltage level wise losses. Hence, it has been recommended to start maintaining feeder wise losses for all the feeders for comprehensive reporting*
   - % Metering at DT Level is found 6 %. NPCL has already started installing DT meters for 100% coverage for DT level energy accounting and monitoring. It is required that the work should be completed in a time bound manner.

c. *Statement of approved losses as compared to actual distribution loses as detailed below reveals that distribution losses of 7.95 % i.e. 3.81 MU in terms of energy units having financial implication of Rs 2.29 crore.*

Year	Approved Losses	Actual	Power purchased MU	Approved Dist. Loss	Actual Distribution loss	Extra loss unit	total purchase cost Rs. crore	loss cost Rs. In crore
A	**B**	**C**	**D**	**E =DxB**	**F=DxC**	**G =F-E**	**H**	**I =H x G / D**
2019-20	8%	8.23%	2,267.28	181.38	186.60	5.21	1,307.28	3.01
2020-21	7.92%	8.39%	2,196.36	173.95	184.27	10.32	1,157.13	5.44
2021-22	7.80%	7.95%	2,542.00	198.28	202.09	3.81	1,525.07	2.29

d. *Statement of Distribution* Losses in HT & LT System is given below, which reveals that there is overall Reduction in average Distribution Loss in HT & LT System as compared to previous years.

S.No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
		Audited	**Audited**	**Audited**
A	**System Losses At 33 KV & Above**			

S.No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
		Audited	Audited	Audited
1	Energy received into the system	2,267.28	2,196.36	2,540.05
2	Energy sold at this voltage level	1,037.87	964.90	1,130.15
3	Energy transmitted to the next (lower) voltage level	1,203.51	1,207.34	1,383.19
4	Energy Lost	25.90	24.12	26.71
5	**Total Loss in the system**	**2.43**	**2.44**	**2.31**
B	**Losses At 11 KV**			
1	Energy received into the system	1,203.51	1,207.34	1,383.19
2	Energy sold at this voltage level	568.47	588.37	702.66
3	Energy transmitted to the next (lower) voltage level	597.62	581.06	636.15
4	Energy Lost	37.42	37.91	44.38
5	**Total Loss in the system**	**6.18**	**6.05**	**5.94**
C	**LT System Losses**			
1	Energy received into the system	597.62	581.06	636.15
2	Energy sold at this voltage level	474.31	458.78	505.23
3	Energy Lost	123.31	122.27	130.92
4	**Total Loss in the system**	**20.63**	**21.04**	**20.58**
D	**Overall Losses**			

S.No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
		Audited	Audited	Audited
1	Energy In (A1)	2,267.28	2,196.36	2,540.05
2	Energy Out (A2+B2+C2)	2,080.65	2,012.05	2,338.04
3	**Total Loss in the system**	**8.23**	**8.39**	**7.95**

% share energy sold & Distribution losses in different potential of electricity

Particulars	Energy sold at this level	% share in energy sales	Losses
33 KV & Above	1,130.15	48.34	2.31%
11 KV	702.66	30.05	5.94%
LT System	505.23	21.61	20.58%
Total	**2,338.04**	**100.00**	**7.95%**

3. Power Purchase

a. **Approved vs Actual**

Detail of power purchased from various sources and actual purchases made during FY 2021-22 is given below along-with our observation

Particular	Approved MU's	% share of Power purchase	Approved Rs /Kwh	Approved Amount	Actual MU	% share of Power purchase	Actual Rate	Actual Amount	Actual qty in approved ratio	Variance (MU)
Long Term –M/s DIL	1,182.74	44.09 %	4.77	564.12	1,157.35	45.56 %	6.14*	710.15	1,119.80	37.56
Medium Term	580.57	21.64 %	5.07	294.26	434.78	17.12 %	4.59	199.46	549.67	-114.90
RE Power	146.31	5.45 %	4.11	60.14	153.90	6.06 %	4.24	65.32	138.52	15.37
RE Power Exchange	319.15	11.90 %	4.43	141.32	73.93	**2.91 %**	5.46	40.33	302.17	-228.24
Short term										
Power Exchange	454.05	16.92 %	4.08	185.12	559.30	**22.02 %**	6.22	347.65	429.89	129.41
Short Term	-	-	-	-	119.58	4.71 %	6.55	78.33	-	119.58
UI	-	-	-	-	41.21	**1.62 %**	6.82	28.11	-	41.21
Total	**2,682.82**	**100.00**	**4.64**	**1,244.96**	**2,540.05**	**100.00**	**5.78**	**1469.35***	**2,540.05**	**0.00**

*Excludes cost of additional coal, change in law, True up arrear etc. aggregating to Rs. 55.73 crore.

Some of the observations noted on this account are as under:

i. Power purchased during 2021-22 is at an average rate of Rs. 5.78 /Kwh as against approved rate of Rs. 4.64 /Kwh.

ii. Power purchased from Long Term Power Purchase Agreement from M/s DIL exceeds the approved rate by 28.72 %.

iii. Procurement from Medium term was less as compared to quantity in proportion of approved Plan by 114.90 MU. Total purchases from Medium Term aggregated to 30.96 % and 0.89 %of total power purchased during First & Second Half year respectively, which resulted in purchases from Power exchange, UI & Short term sources. Review of agreements for power procurement revealed that major Midterm agreements were primarily made for the first half of the financial year to meet peak time demand and no major agreement existed for second half of financial year.

iv. Month wise detail of power purchases as detailed in reveals that 47.58% & 38.79% of total purchases was made from IEX in October'21 & November'21 respectively, which primarily was explained to be owing to shut down of DIL plant during the period (10th Oct'21 to 14th Nov'21) under Long term arrangements, which was met primarily through short term arrangements initiated on 24.09.2021 and petition filed & heard on 06.10.2021 and 07.10.2021 respectively and was approved by UPERC vide order dated 25.10.2021 for the said period and balance requirement from IEX / other sources. In this context it is felt that meticulous planning needs to be made for ensuring effective, continuous and timely availability of power from various Mid term / Short Term Sources.

v. Purchases from Medium term / short term arrangement during Dec 21 & January 22 were 0.34% and 0.38% respectively in absence of agreements and tenders for Day power slot & peak power slots made on 10.11.2021 were approved on 07-02-22.

vi. Purchase from power exchange includes a sum of Rs. 1.33 crore (including GST) paid to M/s APPCL towards trading margin and Rs. 1.60 crore towards exchange fee.

vii. Purchase of Power includes Rs. 55.73 crore towards following heads :

Particulars	Amount (Rs. in Crore)
M/s DIL - Additional Coal (FY 2021-22)	-7.03
M/s DIL - Change in Law (FY 2021-22)	5.12
M/s DIL - True-up Additional Claim FY 16-17 to 18-19 (Taken in PL)	44.82
UPPTCL True-up Arrear (FY 2017-18 & FY 2018-19) as per UPPTCL Tariff order dt. 10.11.2020	12.82

Particulars	Amount (Rs. in Crore)
Total	**55.73**

viii. Purchases from exchange at comparatively higher rates as shown in is primarily on account of unavailability of scheduled power from DIL, shut down of DIL plant, unavailability of Supplies from Short term / Medium Term source as dealt above in point no. (iii) & (iv) above.

ix. During the year 41.21 MU at Rs. 28.11 crore i.e. 1.62 % of total power is from Unscheduled Interchange as compared to 8.58 MU at Rs. 6.08 crore for previous year.

b. Renewable Purchase Obligation

Detail of purchases made under RPO obligation against approved norms are given below:

Actual				
Particular	**Opening Unfulfilled Obligation**	**Obligation for the year**	**Obligation met during the year***	**Balance Obligation Carried Forward**
Solar	44.62	75.14	96.28	23.48
Non-Solar	140.52	112.71	160.63	92.6
Hydro Power	-12.71	56.36	-	43.65
Total	**172.43**	**244.21**	**256.91**	**159.73**

Approved				
Particular	**Opening Unfulfilled**	**Obligation 2021-22**	**Obligation met during the year**	**Closing unfulfilled 2021-22**
Solar	75.62	75.72	53.45	97.89
Non Solar	157.34	113.58	92.87	178.05
HPO	-13.59	56.79	-	43.20
Total	**219.37**	**246.09**	**146.32**	**319.14**

Overall RPO have declined to 159.73 from 172.43 i.e. declined by 7.36% whereas Obligation under HYDRO Power have not been met at all during the year and thus have increased to 43.65 from (12.71).Non-attainment of RPOs was explained to be on account of low availability of power in short term market and fungible nature of solar & Hydro Power.

c. Details of Energy Purchased & Energy Received & Loss of energy

Review of energy exported and Energy received at NPCL Bus as detailed below reveals that overall loss of energy stands at 6.36% i.e. 6.67% in long term, 6.42% in Medium term, 6.59% in medium term and 5.01% in renewable power.

Sl.No.	Supplier's Name	MU Exported	MU Imported at NPCL bus	Loss (MU)	Loss %
A	**Long Term Power**				
	Long Term Power from DIL	1,240.06	1,157.35	82.71	6.67
	Subtotal	**1,240.06**	**1,157.35**	82.71	**6.67**
				-	
B	**Medium Term Power**			-	
	APPCPL- Govt. of AP	205.86	192.56	13.30	6.46
	APPCPL- Govt. of Nagaland	106.33	99.45	6.88	6.47
	APPCPL- Goodwill, HP	35.40	33.22	2.18	6.16
	TPTCL- Govt of Himachal Pradesh	117.02	109.55	7.47	6.38
	Subtotal	**464.61**	**434.78**	**29.83**	**6.42**
				-	
C	**Short Term Power**			-	
	APPCPL (Source-HSPPL)	24.18	22.62	1.56	6.45
	APPCPL (Source-SEMCORP)	24.26	22.68	1.58	6.51
	TPTCL (Source-JPL)	35.07	32.80	2.27	6.47
	TPTCL (Source- PPGCL)	13.65	13.20	0.45	3.30
	PTC (Source- SingroliBhatwari HEP)	2.25	2.10	0.15	6.67
	PTC (Source- JPL, Chhattisgarh)	17.89	16.69	1.20	6.71
	APPCPL (Source- Semcorp Energy)	10.17	9.49	0.68	6.69
	Power Purchase from Exchange	599.28	559.30	39.98	6.67

Sl.No.	Supplier's Name	MU Exported	MU Imported at NPCL bus	Loss (MU)	Loss %
	Subtotal	**726.75**	**678.88**	**47.87**	**6.59**
				-	
D	**Renewable Power**			-	
	Solar Power (GNIDA)	1.22	1.22	-	-
	Solar Power (APPCPL)	0.41	0.41	-	-
	Solar Power (Adani)	53.60	51.81	1.79	3.34
	Solar Power (Tata)	4.80	4.64	0.16	3.33
	Solar Power (Net Metering)	9.13	9.13	-	-
	Wind Power (PTC)	33.15	32.04	1.11	3.35
	Non-Solar (Exchange-RE)	79.12	73.93	5.19	6.56
	APPCPL- (Source- DoP, GoAP)	6.89	6.44	0.45	6.53
	APPCPL- (Source- DoP, Nagaland)	6.67	6.24	0.43	6.45
	APPCPL- (Source- MePDCL, Meghalaya)	28.59	26.74	1.85	6.47
	KREATE- (Source- E&PD, Govt of Sikkim)	16.28	15.23	1.05	6.45
	Subtotal	**239.84**	**227.83**	**12.01**	**5.01**
	Total	**2,671.26**	**2,498.84**	**172.42**	**6.45**
	Unscheduled Interchange / DSM/Sale of Power	41.21	41.21		
	Total	**2,712.47**	**2,540.05**	**172.42**	**6.36**

4. Lease Hold Land

(i) It was observed that 59 no of land as detailed below have been capitalized in books of account by NPCL, out of which 17 nos of land are unused/ vacant as on 31.03.2022. Cost of this unused / vacant land has been disallowed by UPERC in earlier years.

S. No	Land Description	Use / Un-used (Yes / No)	Area of land in Sqr. Meter	Date of Registration	Value as per FAR	Asset Number as per FAR
1	Leasehold Land	Yes	1,500.00	31-07-2003	25,84,687	10000001

S. No	Land Description	Use / Un-used (Yes / No)	Area of land in Sqr. Meter	Date of Registration	Value as per FAR	Asset Number as per FAR
2	Leasehold Land	Yes	1,482.50	31-07-2003	25,51,704	10000002
3	LAND FOR EPIP SUB/STN	Yes	2,104.75	06-10-2004	2,57,730	10000003
4	Leasehold Land Delta SubStation	Yes	1,516.54	27-12-2006	24,95,011	10000004
5	COST OF LAND FOR 33/11KV ELECTRIC SUB/STN AT BUIL	Yes	1,471.50	27-12-2006	26,61,765	10000005
6	COST OF LAND FOR 33/11KV ELECTRIC SUB/STN AT SECTO	Yes	1,500.00	27-12-2006	27,26,957	10000006
7	COST OF LAND FOR KNOWLEDGE PARK-II G.NOIDA	Yes	1,500.20	09-01-2008	28,44,766	10000007
8	COST OF LAND FOR KNOWLEDGE PARK-III G.NOIDA	Yes	1,500.00	09-01-2008	28,44,696	10000008
9	COST OF LAND FOR ELECTRIC SUB/STN AT XU-I, GR NOID	Yes	2,400.00	15-03-2013	58,67,420	10000009
10	COST OF LAND FOR ELECTRIC SUB/STN AT ECOTECH-II, G	Yes	2,400.00	05-03-2012	48,35,420	10000011
11	COST OF LAND FOR ELECTRIC SUB/STN AT CHI-IV, GR NO	Yes	2,207.55	15-09-2012	51,87,110	10000013
12	COST OF LAND FOR ELECTRIC SUB/STN AT GHARBARA, GR	Yes	35,000.00	14-12-2012	8,20,03,420	10000015
13	COST OF LAND FOR ELECTRIC SUB/STN AT OMEGA-II, GR	Yes	1,500.00	25-09-2012	35,29,670	10000016
14	COST OF LAND FOR ELECTRIC SUB/STN AT SIGMA-IV, GR	Yes	2,400.00	14-09-2012	56,37,920	10000017
15	COST OF LAND FOR ELECTRIC SUB/STN AT ZETA-I, GR NO	Yes	2,628.05	29-05-2013	61,73,418	10000018
16	COST OF LAND FOR ELECTRIC SUB/STN AT PI-II, GR NOI	Yes	1,547.17	16-02-2012	24,84,675	10000019
17	COST OF LAND FOR ELECTRIC SUB/STN AT R C GREEN, GR	Yes	64,000.00	03-12-2012	14,99,35,920	10000021
18	COST OF LAND AT SITE B FOR 33/11kV SUB/STN (25% OF	Yes	1,215.00	24-03-2009	61,04,868	10000022

S. No	Land Description	Use / Un-used (Yes / No)	Area of land in Sqr. Meter	Date of Registration	Value as per FAR	Asset Number as per FAR
19	Leasehold Land	Yes	1,500.48	17-08-1996	18,09,165	10000023
20	Leasehold Land	Yes	2,020.00	31-03-2002	9,60,100	10000024
21	Land at Village Hatewa (Near Bilaspur) for 33/11	Yes	843.00	11-10-2010	24,00,830	10000025
22	Land at Jalpura, Greater Noida for 33/11KV	Yes	2,508.00	02-11-2010	1,49,41,230	10000026
23	LAND AT VILLAGE LAKHNAWALI FOR 33/11 KV SUBSTATION	Yes	2,508.30	16-12-2010	1,62,55,460	10000027
24	LAND AT VILLAGE KHERI FOR 33/11 KV SUBSTATION	Yes	1,421.37	29-12-2010	57,95,640	10000028
25	LAND AT INDUSTRIAL AREA SURAJPUR SITE-C HOUSING	Yes	3,400.28	20-06-2011	3,16,91,539	10000029
26	LAND AT PLOT NO. ESS-6, SECTOR-KP-V	Yes	1,500.00	29-05-2013	1,40,68,145	10000034
27	LAND AT PLOT NO. ESS-2, SECTOR-KP-V	Yes	1,500.00	29-05-2013	1,40,68,145	10000035
28	LAND AT PLOT NO. ESS-10, SECTOR-KP-V	Yes	1,500.00	29-05-2013	1,40,68,145	10000036
29	LAND AT PLOT NO.-ESS, ECOTECH-6	Yes	2,400.00	16-01-2014	2,29,96,421	10000037
30	LAND AT PLOT NO. 37/A, KP-I	Yes	2,560.00	25-03-2014	1,46,68,056	10000038
31	LAND AT PLOT NO. ESS, KP-IV	Yes	2,400.00	25-03-2014	1,36,96,392	10000039
32	33/11 K.V S.STN OMICRON-3	Yes	2,400.00	06-02-2015	1,70,62,904	10000043
33	33/11KV ELECTRIC SUB/STN AT KHERI	Yes	120.00	10-06-2015	5,16,020	10000044
34	LAND FOR 33/11KV ELECTRIC SUB/STN AT DELTA-III	Yes	1,630.00	24-07-2016	1,03,23,401	10000045
35	LAND AT PLOT NO. ESS, SECTOR-XU-III	Yes	2,400.00	22-01-2016	2,95,09,194	10000047

S. No	Land Description	Use / Un-used (Yes / No)	Area of land in Sqr. Meter	Date of Registration	Value as per FAR	Asset Number as per FAR
36	LAND AT PLOT NO. ESS, SECTOR – 16	Yes	2,400.00	22-01-2016	2,95,09,194	10000049
37	LAND AT PLOT NO. ESS, ECOTECH – 15	Yes	1,500.00	22-01-2016	1,84,52,861	10000050
38	LAND AT PLOT NO. ESS, TECHZONE – IV	Yes	1,500.00	22-01-2016	1,84,52,861	10000051
39	LAND AT PLOT NO. ESS, BETA - II	Yes	1,469.37	22-01-2016	1,72,05,479	10000052
40	LAND FOR ELECTRIC SUB/STN AT KP-IV	Yes	1,640.00	27-11-2015	1,84,18,681	10000053
41	Land for 33/11 KV Elec Subtation Sector-2, G.Noida	Yes	1,500.00	26-09-2016	1,81,11,965	10000054
42	Land for 33/11 KV Elec Subtation Sector-3, G.Noida	Yes	1,500.00	26-09-2016	1,72,22,824	10000055
43	Plot No 33/11 KV ESS, Sector Ecotech-11	33/11 KV S/stn Capitalised in 2022-23	3,000.00	14-02-2019	3,51,92,439	10000057
44	Land for ESS, Sector Ecotech-1, Extension-1	33/11 KV S/stn Capitalised in 2022-23	3,000.00	22-01-2020	3,48,20,800	10000058
45	Land for ESS, Sector Ecotech-III (Phase-2)	33/11 KV S/stnCapitalised in 2022-23	2,400.00	22-01-2020	2,89,47,530	10000061
46	Land for ESS, Sector-01 Greater Noida	-	2,400.00	29-12-2021	3,70,28,480	10000064
47	Plot No 33/11 KV ESS, Sector-10	-	2,400.00	14-02-2019	2,67,75,050	10000056
48	LAND AT PLOT NO. ESS, OMICRON - 1A	-	3,616.74	22-01-2016	4,44,56,631	10000048
49	Land for ESS, Sector Techzone 2 Greater Noida	-	3,000.00	22-01-2020	3,48,20,800	10000063
50	LAND AT PLOT NO. ESS-I, KP-5	-	37,281.17	27-06-2014	23,72,39,565	10000041

S. No	Land Description	Use / Un-used (Yes / No)	Area of land in Sqr. Meter	Date of Registration	Value as per FAR	Asset Number as per FAR
51	COST OF LAND FOR ELECTRIC SUB/STN AT ETA-I, GR NOI	-	2,423.74	15-09-2012	56,93,323	10000010
52	COST OF LAND FOR ELECTRIC SUB/STN AT PI-I, GR NOID	-	1,500.00	27-01-2012	24,09,420	10000012
53	LAND FOR ELECTRIC SUB/STN AT PHI-II/III, GR No	-	837.00	29-11-2013	20,86,671	10000014
54	COST OF LAND FOR ELECTRIC SUB/STN AT BZP, GR NOIDA	-	2,487.50	16-03-2012	50,21,994	10000020
55	LAND AT PLOT NO. POWER PLANT, ECOTECH-16 (JAUN	-	1,09,000.00	29-12-2013	16,97,20,283	10000040
56	220 KV S.STN - BZP AREA	-	16,806.76	06-02-2015	10,92,64,246	10000042
57	Land for ESS, Sector 16B	-	1,500.00	22-01-2020	1,74,23,901	10000059
58	Land for ESS, Sector Ecotech-III (Phase-1)	-	2,400.00	22-01-2020	2,78,62,030	10000060
59	Land for ESS, Sector Techzone (IT City)	-	10,004.00	22-01-2020	11,60,52,809	10000062

Depreciation on unused land: Depreciation /Amortization of Rs. 1,00,80,245.00 has been charged during the year 2021-22 on the said unused land as detailed below :

Sl No	Description	Asset NO	Amount
1)	Plot No 33/11 KV ESS, Sector Ecotech-11	10000057	3,91,027.10
2)	Land for ESS, Sector Ecotech-1, Extension-1	10000058	3,86,897.78
3)	Land for ESS, Sector Ecotech-III (Phase-2)	10000061	3,21,639.22
4)	Land for ESS, Sector-01 Greater Noida	10000064	1,04,829.00
5)	Plot No 33/11 KV ESS, Sector-10	10000056	2,97,500.56
6)	LAND AT PLOT NO. ESS, OMICRON - 1A	10000048	4,93,962.57
7)	Land for ESS, Sector Techzone 2 Greater Noida	10000063	3,86,897.78
8)	LAND AT PLOT NO. ESS-I, KP-5	10000041	26,35,995.17
9)	COST OF LAND FOR ELECTRIC SUB/STN AT ETA-I, GR NOI	10000010	63,259.14
10)	COST OF LAND FOR ELECTRIC SUB/STN AT PI-I, GR NOID	10000012	26,771.33

Sl No	Description	Asset NO	Amount
11)	LAND FOR ELECTRIC SUB/STN AT PHI-II/III, GR No	10000014	23,185.23
12)	COST OF LAND FOR ELECTRIC SUB/STN AT BZP, GR NOIDA	10000020	55,799.93
13)	LAND AT PLOT NO. POWER PLANT, ECOTECH-16 (JAUN	10000040	18,85,780.93
14)	220 KV S.STN - BZP AREA	10000042	12,14,047.18
15)	Land for ESS, Sector 16B	10000059	1,93,598.90
16)	Land for ESS, Sector Ecotech-III (Phase-1)	10000060	3,09,578.11
17)	Land for ESS, Sector Techzone (IT City)	10000062	12,89,475.66
	Total		**1,00,80,245.88**

Following observations as made in Audited Financial statement for 2021-22 are given below for reference

- During the year Distribution assets of 367 lakh are handed over by GNIDA& Other entities. Total assets handed over by authority / entities Rs. 35946 lakh are in possession of company for distribution of electricity and maintenance thereof and hence not capitalized.
- RC Green EHV S/stn Constructed by GNIDA on LAND of NPCL was transferred to NPCL on payment of actual cost, is not in physical possession of company owing to dispute with UPPTCL.
- The Company, in earlier years, had applied for connectivity of its 220kV **Gharbara Substation** to UPPTCL (STU) which was constructed by GNIDA on the land owned by the Company. During construction, GNIDA, after taking approval from its Board of Directors, handed over this substation to the Company on payment of cost incurred. The Company subsequently completed the construction on its own. Meanwhile, STU did not grant connectivity as applied, hence, a petition was filed before UPERC on 11 May 2015 for seeking directions to STU for granting connectivity and to sign Bulk Power Transmission Agreement (BPTA) with the Company. UPERC, vide its interim order dated 30 June 2016, directed STU to grant connectivity to the Company, however, STU didn't comply with the same.

  UPERC finally disposed off the petition on 31 October 2018 stating that UPPTCL as STU and transmission licensee shall own, operate and maintain 220 kv substation at Gharbara and the Company shall claim refund of the amount deposited with GNIDA towards cost of substation. The Company has filed an appeal against the above order before APTEL on 11 December 2018 which has since been admitted on 12 February 2019. The appeal is pending for decision.

- 132 KV Line for OPPO Mobile India Private Limited - As per UPERC order ownership of 132 KV line is with UPPTCL as STU and not with the company.

5. **Capital Expenditure**

a. **Approved vs Actual:** Detail of capital expenditure approved and actual capital expenditure incurred during 2021-22 is given as under:

Sl. No.	Nature of Works	Approved	Rs. Crore Actual	No of projects as submitted by co
I	New Connections, Replacement Stock & Metering	**239.71**	46.81	76
II	New Connection to Oppo Mobile India Pvt Ltd at 132 kV voltage level		54.89	3
III	Substations, Transformers, 33kV, 11 kV & LT Network		67.74	42
IV	Process System Automation		2.80	36
V	IT Projects		11.05	15
VI	Civil Works & Office Infrastructure Facility		9.52	9
VII	Tools & Testing Equipment		1.06	2
VIII	Vehicles		1.58	NA
IX	Lease Hold Land		3.70	1
X	Sub-Total	239.71	199.16	
XI	Interest Capitalization	Included above	NA	
XII	Salary Capitalization	Included above	Included Above	
XIII	**Sub-Total**	**239.71**	**199.16**	
XIV	**LESS: CONSUMER CONTRIBUTION**	112.51	78.79	
XV	**LESS: ASSETS RETIRED**	6.65	10.44	
XVI	**NET CAPITAL EXPENDITURE**	**120.55**	**109.93**	

- Overall capital expenditure at Rs. 109.93 crore including lease hold land of Rs. 3.70 crore is 8.81 % less than approved capital expenditure.

b. Status of Comparative head wise Capital expenditure during 2019-20,2020-21 and 2021-22 is given below

Rs. In crore

Sl. No.	Particular	Past Years			Current Year	Variation 2019-20		Variation 2020-21		Variation 2021-22	
		2018-19	2019-20	2020-21	2021-22	No.	%	No.	%	No.	%
1	New Connection	17.75	18.11	25.56	97.00	0.36	2.03%	7.45	41.14%	71.44	279.50%
2	Replacement Stock	5.18	4.5	2.03	2.75	-0.68	-13.13%	-2.47	-54.89%	0.72	35.47%
3	Metering	0.26	0.59	2.52	1.95	0.33	126.92%	1.93	327.12%	-0.57	-22.62%
4	33/11 KV Substation	13.94	25.57	5.01	6.81	11.63	83.43%	-20.56	-80.41%	1.80	35.93%
5	33 KV Network Development	14.01	18.87	17.3	21.64	4.86	34.69%	-1.57	-8.32%	4.34	25.09%
6	11 KV Network Development	18.05	19.6	14.31	21.44	1.55	8.59%	-5.29	-26.99%	7.13	49.83%
7	LT Network Development	17.62	21.62	8.45	17.10	4.00	22.70%	-13.17	-60.92%	8.65	102.37%
8	Network Renovation	0.56	1	0.53	0.42	0.44	78.57%	-0.47	-47.00%	-0.11	-20.75%
9	Process System Automation	6.43	7.44	5.16	2.80	1.01	15.71%	-2.28	-30.65%	-2.36	-45.74%
10	Civil Work & Office Infrastructure Facility	12.03	16.78	9.37	9.52	4.75	39.48%	-7.41	-44.16%	0.15	1.60%
11	IT Projects	4.34	7.06	9.81	11.05	2.72	62.67%	2.75	38.95%	1.24	12.64%
12	Tool & Testing Equipmemts	0.45	0.02	0.03	1.06	-0.43	-95.56%	0.01	50.00%	1.03	3433.33 %
13	Vehicles	1.93	1.92	0.14	1.58	-0.01	-0.52%	-1.78	-92.71%	1.44	1028.57 %
14	Demand Side Management	0		0	-	-		-		-	
15	Leasehold Land	6.2	25.99	0	3.70	19.79	319.19%	-25.99	-100.00%	3.70	
16	Payment to UPPTCL for construction of 5 Nos. 33 KV Bay at 400/220/132/33	0	20.48	0	0.33	20.48		-20.48	-100.00%	0.33	

Sl. No.	Particular	Past Years			Current Year	Variation 2019-20		Variation 2020-21		Variation 2021-22	
		2018-19	2019-20	2020-21	2021-22	No.	%	No.	%	No.	%
	KV UPPTCL substation at sector 148 Noida										
17	Payment to UPPTCL for construction of 220 KV LILO at 220/132/33 KV R C Green Substation at Pali, Greater Noida	0	19.12	0	-	19.12		-19.12	-100.00%	-	
18	Mis./Contingent Work	6.62	0	0	-	-6.62	-100.00%	-		-	
19	Interest / Expenses Capitalised	0	0	0	-	-		-		-	
20	Captalisation done for Loss Reduction									-	
21	Salary Capitalised	Included in above									
						-		-	-	-	
	Total	**125.37**	**208.67**	**100.22**	**199.15**	**83.30**	**66.44%**	**-108.45**	**-51.97%**	**98.93**	**98.71%**

- As per details provided by NPCL Overall Capex Increased by 98.71% as compared to previous year.
- Capex in case of new connections increased by 279.50 % whereas in case of metering, it is decreased by 22.62%

c. Capital Expenditure on projects of value exceeding Rs. 10 Crore in FY 2021-22

(i) During review of the aspect of capital incurrence of capital expenditure of value exceeding Rs. 10 Crore with prior approval of UPERC it was observed that company has not reported any such project to UPERC. However, in this context it was observed that company has reported in tariff petition that During FY

2020-21, M/s OPPO Mobiles India Private Limited, situated at Plot No.1, Ecotech-VII, Greater Noida applied for additional connection of 40 MVA with connectivity at 132 kV voltage level. Accordingly, the Company in turn applied to UPPTCL for grant of one bay at 132 kV at 400 kV Grid UPPTCL's Substation at Sec-148 Noida and for construction of dedicated line at 132 kV from the above substation to the plant facility of the consumer at Greater Noida on Deposit Work basis. The entire work is done by UPPTCLagainst consumer contribution received from M/s Oppo, however, being a distribution licensee, the cost of the 132kV Bay, dedicated line, metering and other associated equipment is capitalized in the books of the Company in FY 2021-22. Accordingly, the cost of Rs. 54.89 Crore is capitalized in FY 2021-22. It is further submitted that entire amount of Rs. 54.89 Crore has been recovered from the Consumer, therefore, the same is being reduced from the total cost of capital expenditure while considering the fund requirement, interest on loan, depreciation and return on equity. Thus, the expenditure incurred in respect of this new connection to M/s Oppo Mobile do not have any impact on the ARR for FY 2021-22 and subsequent years.

(ii) Review of procedure followed by the company for undertaking capital expenditure revealed that project is undertaken on the basis of CAPEX requirement for new Sub Station, strengthening of existing S/stn at various locations and period etc. Further, a project report detailing various aspects i.e. technical requirements / specifications, project cost under various heads i.e. Civil Cost, Electrical equipment, erection & testing, Commissioning, Line network, Automations etc. is prepared by the operation department and approved by the competent authority before undertaking the project for facilitating proper monitoring & control on the project activities. However, Cost of Land is not taken into account for determining the project cost as the same is generally available with the company and separately capitalized in books of account at the time of its procurement. Separate project code is allotted to different activities of project on the basis of nature, period & Location of activity for purposes of capitalization in SAP. However, the cost incurred on various components is classified in books of account depending upon the nature of fixed assets required for disclosure in annual account as per statutory requirement of The Companies Act, Ind AS and charging of depreciation as per applicable rates for respective assets etc. In this context details of various projects submitted by the company in tariff petition for FY 2021-22 is given as under

Sl. No.	Nature of Works	Rs. Crore Actual	No of projects
I	New Connections, Replacement Stock & Metering	46.81	76
II	New Connection to Oppo Mobile India Pvt Ltd at 132 kV voltage level	54.89	3
III	Substations, Transformers, 33kV, 11 kV & LT Network	67.74	42
IV	Process System Automation	2.80	36
V	IT Projects	11.05	15
VI	Civil Works & Office Infrastructure Facility	9.52	9
VII	Tools & Testing Equipment	1.06	2
VIII	Vehicles	1.58	NA
IX	Lease Hold Land	3.70	1
X	**Sub-Total**	**199.16**	

Procedure adopted for undertaking above mentioned projects was reviewed on random basis and found that project report detailing various activities with cost estimates duly approved by competent authority is undertaken and capitalised in books of account. However, in this context it is relevant to mention that

- Expenditure estimated under various sub heads in project cost could not be fully linked with the expenditure shown in Fixed Assets Register primarily owing to basis of booking of expenditure in books of account as per statutory requirement in the manner dealt herein above.

- Although separate records for each sanction scheme was kept by respective department but statement showing number of project undertaken during a given period in a systematic manner was not maintained. Accordingly, we are of the view that company may to maintain a separate record for showing project wise detail undertaken to facilitate referencing and linking up of the same with fixed assets appearing in books of account.

- Regarding number of projects undertaken during the FY 2021-22 as mentioned in table above, we were explained that most of the projects undertaken are in respect of construction of new 33/11 KV substation, extension of existing Substation are required to be undertaken for various locations as per emerging requirements at various point of time with varying financial implication and as such the total cost involved for each project is generally less than 10 crores, which do not requires prior approval of UPERC.

(iii) During review of procurement procedures, it was observed that the company has formulated process of procurement and process flow chart for procurement of goods and services required for CAPEX, maintenance requirement etc. As per laid down procedure procurement is made through SRM module provided in SAP system from approved vendors by the company. The procedure provides for receipt of indents from respective departments, sending of RFX to vendors, Receipt of offers, evaluation of received offers through competitive statements generated by SRM, seeking of revised offers, reverse auction for IT & Cables, approvals as per delegated powers, placement of orders, inspection of material, Dispatch instruction, monitoring of supplies, updating of inventory, closure of PO after receipt of material etc. Purchases made were reviewed on test check basis was found to be as per laid down procedure. Further, procurement made and processes followed thereof are also examined by internal auditors and covered in quarterly internal audit report. However, considering the size of procurements we are of the view that

- Aspect of enlarging the base of approved vendors from different locations as well as procurement through competitive bidding in respect of large size procurements requires consideration by company for optimization of procurement

(iv) Capital expenditure includes 11 Vehicle aggregating to Rs. 1.58 crore were purchased during the FY 2021-22

O & M expenses

A. Comparison of Approved Vs Actual expenses incurred during 2021-22

Sl. No.	Particulars	Approved	Actual (21-22)	(Rs. Crore) Variance	Variance (%)
1	Repair & Maintenance Expenses	39.16	53.97	14.81	37.82 %
2	Employees Expenses including retiral benefits	31.25	68.26	37.01	118.43 %

Sl. No.	Particulars	Approved	Actual (21-22)	(Rs. Crore) Variance	Variance (%)
3	Administrative & General Expenses	14.51	15.67	1.16	7.99 %
4	**Total O&M Expenses**	**84.93**	**137.9**	**52.97**	**62.37 %**
5	Employee Cost Capitalised	-10	-8.98	1.02	-10.20 %
6	**Net O&M Expenses**	**74.93**	**128.92**	**53.99**	**72.05 %**

Actual Expenses are 72.05% more than the approved expenses and there is variance of 118.43% in Employee expenses.

B. Comparison with head wise O&M expenditure in FY 2021-22 with respect to expenditure in Previous Year is given as under:

Particulars	FY 21-22	FY 20-21	Increase over 20-21	Increase %
	Rs. in Crore			
Employees Expenses including retiral benefits				
Salaries, wages and bonus	62.43	51.87		
Contribution to provident and other funds	3.59	3.09		
Gratuity [refer note 24]	1.09	1.01		
Staff welfare expenses	1.19	1.07		
	68.31	**57.04**	11.26	19.74%
Less:- Capitalisation of expenses	-8.98	-9.82	0.84	-8.57%
Sub Total	**59.33**	**47.22**	12.10	25.63%
Repair & Maintenance Expenses*				
Repairs and maintenance - transmission and distribution system	34.74	32.69	2.05	6.26%
Repairs and maintenance - others	9.12	5.81	3.31	56.90%

Particulars	FY 21-22	FY 20-21	Increase over 20-21	Increase %
	Rs. in Crore			
Security expenses	8.41	6.53	1.88	28.85%
Insurance	1.59	1.39	0.20	14.08%
Power and fuel	0.12	0.10	0.02	17.29%
Sub Total	**53.97**	**46.52**	7.45	16.02%
Administrative & General Expenses				
Rent	0.08	0.10	-0.02	-20.83%
Rates and taxes	0.01	0.03	-0.02	-63.42%
Travelling and conveyance	0.64	0.49	0.16	32.23%
Legal and professional charges	9.09	8.98	0.11	1.21%
Director’s fees	0.08	0.11	-0.03	-27.03%
Payment to auditors	0.68	0.72	-0.04	-5.35%
Miscellaneous expenses	3.96	2.95	1.01	34.38%
Other borrowing costs	1.12	1.23	-0.11	-8.79%
Sub Total	**15.67**	**14.60**	1.06	7.27%
Total	**128.97**	**108.35**	**20.62**	**19.03%**

- Other borrowing cost should be excluded as the same is provided on normative basis.
- Overall expenditure has increased by 19.03% as compared to previous years.
- Expenditure on repair and maintenance increased by 16.02 % as compared to 2020-21. In this regard we were explained that expenditure is comparatively higher in comparison of last year when no major activity has taken place in 2020-21 owing to Covid-19 impact particularly under the head R & M (Other)
- It was observed that employee cost has increased by 25.63% over the previous year. In this regard it is observed that number of employees in 2020-21 increased by 5% but average salary decreased by 6% owing to impact of Covid-19 wherein expenses were curtailed and salary increments were withheld / minimised. Accordingly, expenditure increased in FY 2021-22 as compared to expenditure of 2020-21 particularly owing to new recruitment and salary increments. Details of Numbers of employee and Average salary of Last 3 years are given below for reference.

Particulars	U.o.M.	2019-20	2020-21	2021-22
Gross Emp. Exp.	Rs. Lakh	5,685.93	5,629.42	6,826.43
Average No. of Emp	Nos.	425.00	448.00	468.00
% increase in Number of Employee			5.41%	4.46%
Average Salary	Rs. Lakh	13.38	12.57	14.59
Increment over Avg. Salary of FY 20	%		-6%	9%

C. Year wise detail of Employee cost capitalized as given below reveals that % of employee cost capitalized is low as compared to previous years.

Year	Employee Cost	Employee cost Capitalized	Net Cost after Capitalization	%
2015-16	26.95	6.9	20.05	25.60
2016-17	34.13	12.32	21.81	36.10
2017-18	41.55	10.34	31.21	24.89
2018-19	48.73	8.99	39.74	18.45
2019-20	56.44	10.32	46.12	18.28
2020-21	57.04	9.82	47.22	17.22
2021-22	68.31	8.98	59.33	13.15

D. **Increase in Minimum Wages**: Details of Minimum wages as revised by Governemnt of Uttar Pradesh under the Payment of Minimum Wage Act is given below which reveals that minimum wages has increased by approx. 24 % as compared to minimum wages as on 1st April 2017.

Minimum Wages in State of U.P.				
Class of labour	As on 1st Apr'17	w.e.f. 1st Apr'21	w.e.f. 1st Oct'21	% increase in C over A
	A	B	C	D
Skilled	9,119	11,185	11,316	24.09%
Semi-skilled	8,141	9,985	10,102	24.09%

Unskilled	7,400	9,078	9,184	24.11%

6. Summary of Captive consumption

Details of location wise captive consumption during FY 2021-22 as detailed below reveals that 27,85,472 kWh were captively consumed by NPCL as against 25,04,861 kWh in 2020-21 i.e. captive consumption has increased by 11.20%. We were explained that Captive consumption is adjusted against sold unit at NIL value. In this context we are of the view that the policy / practise followed for captive consumption may be suitably disclosed in financial statements of company.

Sr No.	Location	Total
		(kWh)
1	ALPHA-1	26199
2	BUILDERS AREA	78755
3	CHI-3	19720
4	CONTAINER	13568
5	DELTA-2	52889
6	DM AWAS	18875
7	EPIP	19468
8	ETA	4673
9	GIRDHARPUR	17731
10	HATEWA	12565
11	JALPURA	22136
12	KASNA	2445
13	KNOWLEDGE PARK-2	142278
14	KNOWLEDGE PARK-3	237295
15	LAKHNAWALI	14688
16	SECTOR-37	61527
17	SIGMA-4	66651
18	SITE-B	34224
19	SITE-C STORE	20679
20	SUNPURA	10754
21	SURAJPUR	71096
22	SURAJPUR SOUTH	2104
23	UDYOG KENDRA	19218
24	SAWRAN NAGRI SUBSTATION	13952
25	CHI-4 SUBSTATION	49636
26	BETA-1 SUBSTATION	18054
27	GAMA SUBSTATION	12680

Sr No.	Location	Total
28	P-3 SUBSTATION	17465
29	LUKSAR JAIL	12304
30	DELTA-1	10796
31	BIRONDI	26713
32	XU-I	36832
33	ESS-10	29797
34	ESS-2	22977
35	ECOTECH -EXT1	9544
36	IT CITY-1	10223
37	ECOTECH-6	27589
38	OMICRON-3	18806
39	Sector 36 (Pocket Substation)	15903
40	KP-1 (Pocket Substation)	32961
41	KP-4	964434
42	Zeta-1	29601
43	KP-1 (Customer Care Centre)	180606
44	Gharbara - 220 kV	20952
45	Maripat Power Plant	9489
46	Ecotech-15	23631
47	Ecotech-2	83781
48	Beta-2	19030
49	Sector-16	18658
50	XU-3	1430
51	Sector-2	13560
52	Sector-3	16180
53	Techzone-4	55490
54	ESS-6	12859
	TOTAL	**2785472**

7. **Payment of Income tax**: As per audited financial statements, Current Tax Expenses stands at Rs. 20.34 crore. Details of advance taxes paid during the year by the company is given below:

Advance Tax 2021-22	Amount
15-06-2021	2,70,00,000.00
14-09-2021	5,70,00,000.00
15-12-2021	7,40,00,000.00
14-03-2022	6,00,00,000.00
Total Advance Tax Payment	**21,80,00,000.00**

TDS	2,55,47,412.00
TCS	21,32,154.00
Total Tax Payment	**24,56,79,566.00**

8. Bad debts

Status of Bad debts written off during the year as detailed below reveals that Bad debts written off during the year are Rs. 7.48 crores (Net) i.e. 0.37% of receivable has been w/ff. There is increase of 10% in bad debts as compared to previous year.

Particulars	2019-20	2020-21	2021-22	Increase in 2021-22	% increase in 21-22	Increase in 2020-21	% increase in 20-21
Bad Debts w/off (net)	8.56	6.8	7.48	0.68	10.00 %	-1.76	-20.56 %
Energy Charges Current Year	1786.89	1761.06	2017.59	256.53	14.57	-25.83	-1.45
Bad & Doubtful debt as % of revenue during the year	**0.48 %**	**0.39 %**	**0.37 %**				

9. Detail of Interest on Term Loan for FY 2021-22 on normative basis as approved and actual provided in tariff petition given below shows that actual normative interest at 52.07 crore is 14.79 % higher than approved rate.

Sl. No.	Loan Computation	Ref.	Approved	Rs. in Crore Actual
1	**Net Normative loan – Opening**	**A**	**438.43**	**515.07**
2	Increase/Decrease due to ACE during the Year	B	84.39	76.95
3	Repayments of Normative Loan during the year	C	46.12	56.37
4	**Net Normative loan – Closing**	**d=a+b-c**	**476.7**	**535.65**
5	Average Normative Loan*	e=(a+d)/2	457.57	525.36

6	Weighted average Rate of Interest on actual Loans	F	9.91%	9.91%
7	**Interest on Normative loan**	**g=e x f**	**45.36**	**52.07**

Other

1. During the year, payment of Rs. 424.80 lakh i.e. Rs. 35.40 lakh per month made to M/s Khaitan & Co. (which is also a related party) for Advisory Service. In this regard it was observed that the said arrangement is continuing from earlier years.

Commission Analysis

The Commission has taken note of report/observation made by the external auditor.

4 TRUE UP OF FY 2021-22

4.1 BACKGROUND

4.1.1 NPCL has filed the truing up of expenditures and revenue for FY 2021-22 based on the expenditures and revenue as per the audited accounts and Regulations. In this section, the Commission has analyzed all the elements of expenditures and revenue for FY 2021-22 and has undertaken the truing up of expenses and revenue after prudence check of the data made available by the Petitioner as per Regulations.

4.1.2 The Petitioner submitted that, the Regulation 6 of MYT Regulation, 2019, states about the True Up of the Aggregate Revenue Requirement of the Distribution Licensee. The Regulation 6 of the MYT Regulation, 2019 is reproduced below:

Quote

6.True-Up

6.1 The Licensee shall file Petition for True-Up as provided in Regulation 4.1 of these Regulations:

Provided that the Petition shall include information in such form as may be stipulated by the Commission, together with the ***Accounting Statements****, extracts of books of account and such other details, etc., as per the Guidelines and Formats as may be prescribed by the Commission.*

6.2 The Commission shall carry out Truing-Up exercise stipulated in the provisions of these Regulations. True-Up of Expenses and Revenue shall be on the basis of approved and actual expenses, revenue, etc., based on prudence check of ***Accounting Statements*** *of the Licensee for the Financial Year.*

6.3 The Distribution Licensee shall ensure that the Category/ Sub-Category wise billed revenue as per the Rate Schedule is included in its ***Accounting Statements.***

Unquote

4.1.3 The Petitioner based on the Accounting Statements, actual operational data and Regulations for the Financial Year 2021-22, the Petitioner is submitting this petition for Truing-up ARR for FY 2021-22 for the kind perusal and approval of the

Commission in the prescribed formats as per MYT Regulations, 2019.

4.1.4 Further, Regulation 2.1 of the MYT Regulation, 2019 defines “Accounting Statement” as follows: -

Quote

2.1 In these Regulations, unless the context otherwise requires:

*(1) “**Accounting Statement**” means for each financial year the following statements, namely: -*

i) Audited Balance sheet, prepared in accordance with the form contained in Part I of Schedule 3 to the Companies Act 2013, as amended from time to time.

ii) Audited Profit and loss accounts, complying with the requirements contained in Part II of Schedule 3 to the Companies Act 2013, as amended from time to time.

iii) Audited Cash flow statement, prepared in accordance with the Accounting Standard on cash flow Statement (IND AS-3) of the Institute of Chartered Accountants of India, as amended from time to time.

iv) Report of statutory auditors of the Licensee.

v) Cost records if any, prescribed by the Central Government under Section 148 of the Companies Act 2013, as amended from time to time.

vi) Together with notes thereto, and such other supporting statements and information as the Commission may direct from time to time;

vii) Category/ Sub-Category wise billed revenue as per the Rate Schedule.

Unquote

4.1.5 The Petitioner submitted its “Accounting Statement” for FY 2021-22 which comprises of the following: -

I. Balance sheet, prepared in accordance with the form contained in Part I of Schedule III to the Companies Act 2013;

II. Statement of Profit and loss, complying with the requirements contained in Part II of Schedule III to the Companies Act 2013;

III. Cash flow statement, prepared in accordance with the applicable accounting standard on cash flow Statement;

IV. Report of statutory auditors of the licensee together with notes on audited accounts;

V. Cost accounts and records prepared in accordance with provisions of Section 148 of the Companies Act, 2013 duly verified and audited by a qualified Cost Accountant.

VI. Together with notes thereto

4.1.6 The Petitioner further submitted, the details of True-up of ARR for FY 2021-22 and operational results as per the Accounting Statement for FY 2021-22 are provided here-in-below for the kind perusal and approval of the Commission. The Petitioner has also submitted the Annual Energy Audit Report for FY 2021-22.

4.2 NUMBER OF CONSUMERS, CONNECTED LOAD AND SALES

Petitioner's Submission

4.2.1 The Petitioner submitted that during FY 2021-22, the Commission vide its Tariff Order dated August 26, 2021 approved the Energy Sales and revenue for FY 2021-22. The details are given in Table herein below: -

TABLE 4-1: APPROVED ENERGY SALES & REVENUE FOR FY 2021-22

Sl. No.	Category	Sales (MU)	Revenue (Rs. Crore)	ABR (Rs/kWh)
1	LMV-1: Domestic Light, Fan & Power	767.63	570.63	7.43
2	LMV-2: Non-Domestic Light & Fan & Power	50.71	42.87	8.45
3	LMV-3: Public Lamps	37.52	32.11	8.56
4	LMV-4: Institutions	19.95	20.21	10.13
5	LMV-5: Private Tube Wells	25.49	2.72	1.07
6	LMV-6: Small and Medium Power	112.72	112.02	9.94
7	LMV-7: Public Water Works	25.13	24.96	9.93
8	LMV-8: STW and Pumped Canals	0.09	0.11	12.75
9	LMV-9: Temporary Supply	44.80	47.20	10.54

Sl. No.	Category	Sales	Revenue	ABR
		(MU)	(Rs. Crore)	(Rs/kWh)
10	LMV-11: Electric Vehicle Charging	5.48	3.96	7.23
11	HV-1: Non-Industrial Bulk Power	319.98	317.75	9.93
12	HV-2: Large and Heavy Power	1,064.07	874.47	8.22
Total		**2,473.57**	**2,049.03**	**8.28**

4.2.2 The Petitioner further submitted that the Commission in its Tariff Order dated August 26, 2021 has approved the Number of Consumers and Connected Load as 1,57,547 Nos & 1,381.80 MW for FY 2021-22, whereas, the same as per Audited Accounts are 1,17,753 Nos and 1,250.23 MW respectively. The details of the same is shown in table below: -

TABLE 4-2: APPROVED NO. OF CONSUMERS & CONNECTED LOAD (FY 2021-22)

Sl. No.	Category	No. of Consumers	Connected Load (MW)
1	LMV-1: Domestic Light, Fan & Power	1,44,719	564.26
2	LMV-2: Non Domestic Light, Fan & Power	4667	38.43
3	LMV-3: Public Lamps	297	11.15
4	LMV-4: Institution	535	7.05
5	LMV-5: Private Tube Wells	1,308	6.47
6	LMV-6: Small and Medium Power	3,743	87.66
7	LMV-7: Public Water Works	257	9.97
8	LMV-8: STW and Pumped Canals	8	0.10
9	LMV-9: Temporary Supply	694	19.04
10	LMV-11: Electric Vehicle Charging	129	10.07
11	HV-1: Non Industrial Bulk Power	251	135.21
12	HV-2: Large and Heavy Power	939	492.39
Total		**1,57,547**	**1,381.80**

TABLE 4-3: ACTUAL NO. OF CONSUMERS & CONNECTED LOAD (FY 2021-22)

Sl. No.	Category	No. of Consumers	Connected Load (MW)
1	LMV-1: Domestic Light, Fan & Power	1,06,390	510
2	LMV-2: Non Domestic Light, Fan & Power	3,649	33

Sl. No.	Category	No. of Consumers	Connected Load (MW)
3	LMV-3: Public Lamps	412	12
4	LMV-4: Institution	526	7
5	LMV-5: Private Tube Wells	1,053	5
6	LMV-6: Small and Medium Power	3,494	83
7	LMV-7: Public Water Works	261	12
8	LMV-8: STW and Pumped Canals	8	0
9	LMV-9: Temporary Supply	837	19
10	LMV-11: Electric Vehicle Charging	0	0
11	HV-1: Non Industrial Bulk Power	225	120
12	HV-2: Large and Heavy Power	898	449
	Total	1,17,753	1,250
	Actual as on 31st March 2021	1,06,707	1,147
	Growth over previous year	10.35%	9.04%

4.2.3 The Petitioner has submitted that the COVID-19 Pandemic has caused major disruption globally and in India, since March, 2020. Starting from the total lock down, severe restrictions were imposed such as severe restrictions in the Containment Zones, movement of people / goods, guidelines on quarantine, partial lock down, imposition of Section 144 and Curfews during weekends & nights, etc. In fact, Gautam Buddha Nagar district covering Noida & Greater Noida was amongst the highest COVID-19 infected districts and being subjects to severe restriction / disruption in work. Even, during the April, 2021 & May, 2021 sudden spurt of COVID-19 has again pushed back the momentum somewhat gained in previous 5-6 month. Due to the above, there was a considerable decline in the demand of electricity in commercial and industrial segments, which are the most organised, having least T & D losses, being the best pay masters and are the subsidising categories of consumers for a Utility. To the contrary, due to the restriction on the movement of human beings and to stay quarantined at home, the demand of domestic consumers shoot-up sharply which are low paying/ subsidised categories of Consumers. Also, due to maximum supply at LT level, the power theft also gone up resulting into higher losses. From mid-June, 2021 the demand of the Greater Noida area again started rising and reached to the peak at 522 MW in July, 2021 (on July 7, 2021 (post lockdown)) as compared to the peak demand at 446 MW in the previous year i.e. FY 2020-21. The Company was able to meet the aforesaid rise in demand due to its farsighted planning and constant persuasion with UPPTCL to provide connectivity for additional 100 MW capacity from their upcoming substation at Sector-148 Noida which got energized in February, 2021.

4.2.4 Therefore, owing to abovementioned rise in power demand (post lockdown) as well as increased connectivity, the Petitioner achieved sales of 2,338.04 MU and revenue of Rs. 1,939.66 Crore during FY 2021-22, which was slightly lesser than 2,473.57 MU and Rs. 2,049.03 Crore approved by the Commission vide Tariff Order dated August 26, 2021. The Petitioner further submitted that the projection of number of consumers and connected load was based on certain assumptions regarding various factors such as forthcoming development in area, Master Plan of Greater Noida Industrial Development Authority, Central / State Govt. Schemes like "Saubhagya" etc. However, the actual number of consumers and connected load have varied because of the variations in the aforesaid parameters.

4.2.5 On the basis of above details of Connected Load and Consumer Numbers, the Petitioner has requested the Commission to approve the same as per Accounting Statements for FY 2021-22.

4.3 ENERGY SALES

Petitioner Submission:

4.3.1 The Petitioner has submitted the actual category-wise sales, revenue and average realization for FY 2021-22 as per Accounting Statements in the Table below for approval of the Commission: -

Table 4-4: DETAILS OF ACTUAL CATEGORY WISE SALES SUBMITTED BY THE PETITIONER FOR FY 2021-22 (MU)

Sl. No.	Category	Sales	Revenue	ABR
		(MU)	(Rs. Crore)	(Rs./kWh)
1	LMV-1: Domestic Light, Fan & Power	694.48	464.53	6.69
2	LMV-2: Non Domestic Light, Fan & Power	41.45	46.89	11.31
3	LMV-3: Public Lamps	37.35	34.90	9.34
4	LMV-4: Institutions	12.25	10.60	8.66
5	LMV-5: Private Tube Wells	14.58	3.68	2.53
6	LMV 6: Small and Medium Power	100.70	103.59	10.29

Sl. No.	Category	Sales	Revenue	ABR
		(MU)	(Rs. Crore)	(Rs./kWh)
7	LMV-7: Public Water Works	24.91	27.69	11.12
8	LMV-8: STW and Pumped Canals	0.06	0.21	32.52
9	LMV-9: Temporary Supply	45.96	57.06	12.42
10	LMV-11: Electric Vehicle Charging	0.00	0.00	0.00
11	HV-1: Non Industrial Bulk Power	216.13	237.70	11.00
12	HV-2: Large and Heavy Power	1,150.17	952.80	8.28
Total		**2,338.04**	**1,939.66**	**8.30**

4.3.2 The Petitioner has submitted that the Commission vide Tariff Order dated July 20, 2022 has included the deemed revenue against the Captive Consumption of the Company at the rate of LMV-4(B) and Sales (MU) at the time of True up for FY 2020-21. Aggrieved by the aforesaid treatment, the Company has filed an Appeal No 398 of 2022 before the Hon'ble APTEL, which is pending for adjudication.

4.3.3 The Petitioner, also submitted that the aforesaid matter is still pending before the Hon'ble APTEL and the Petitioner has considered the captive consumption for FY 2022-23 under Category 4(B) as per the directions of the Commission, however, the revenue has been considered at NIL as per the past practice. The Petitioner further submitted that if the Captive Consumption is not included in overall energy sales, then the same will result into incorrect computation of the T&D Losses. Therefore, it is very much required to include the Captive Consumption in the overall energy sales of the Petitioner for FY 2021-22. The Petitioner also submitted that the unit consumed captively were earlier undertaken by them in LMV-4 (A) category. The Petitioner submitted the details of the Captive Consumption and corresponding amount, as per the LMV- 4(B) Tariff Schedule, which is detailed in the table given below:

TABLE 4-5: CAPTIVE CONSUMPTION REVENUE

Particulars	FY 2021-22	Remark
Sales (MU)	2.79	Included in Sales
Revenue (Rs. Crore)	5.42	Not included in Revenue

4.3.4 The Petitioner has further submitted that all the connections for captive purposes are metered and duly reconciled for every month. The recorded energy in the meters has been considered in the sales since inception and allowed by the Commission.

4.3.5 The Petitioner has also submitted that the Hon'ble Tribunal has dealt the similar issue related to the self/ captive consumption by a Distribution Licensee in the matter of **Arun Kumar Datta Vs. DERC & Anr. in Appeal No.195 of 2013 [Judgement dated 09th February, 2015]** wherein it was observed as:

"*13.4 We feel that the Appellant should have installed meters for self-consumption in all its offices, call centers, substations, etc. The Respondent no.2 does not need specific instructions for the same. When the Respondent no.2 is including self-consumption in its energy sale figures, then it was legally bound to supply electricity for own consumption only through correct meters.* ***<u>We feel that the State Commission should have allowed self consumption only to the extent of actual consumption for metered installations</u>****. The formula proposed by the Respondent no. 2 for calculating own consumption in its installations is for calculating energy consumption for consumers in case of faulty/tempered meters.* ***<u>Accordingly, we direct the State Commission to redetermine the self consumption based on the metered data only.</u>*** *We also do not feel that this would result in change in procedure in true up with respect to the MYT order dated 23.02.2008. In the MYT order the consumption is based on the projections. In the MYT order the State Commission has not approved that the self consumption would not be metered and would only be assessed by a formula considering the load, number of days/hours, load factor, etc.*

13.5 As regards contention of the Appellant for determination of AT&C loss, ***<u>we feel that if the self consumption is deducted from energy sales figures then corresponding reduction has to be effected in the energy input into the distribution system also</u>****. In view of our directions in para 13.4, we do not want to give any direction with regard to procedure for determination of AT&C loss in the true-up of FY 2010-11. [Emphasis Supplied]"*

4.3.6 Therefore, the Petitioner has submitted that from the above Judgement of the Hon'ble Tribunal it is also clear that the self / captive consumption by Distribution Licensee in running its offices, call centers, substations, Distribution Business etc.

are require to be allowed by the Commission to the extent of actual consumption for metered installations.

4.3.7 Thus, the Petitioner has submitted to continue the treatment of captive consumption at NIL value as the same has been considered by the Commission in the previous Orders. Captive consumption cannot be treated as sale. Sale in its grammatical means any transfer of property in goods by one person to another. The Petitioner also submitted that there is no transfer in case of captive consumption.

4.3.8 Additionally, the Petitioner submitted that if both Captive Consumption (MU) and Revenue (Rs.) are considered, then the corresponding actual expenses in A&G expenses should also be allowed, as the base A&G expenses does not include expenses on account of Captive Consumption due to the reason that the Commission has first time decided to include the same in Revenue of FY 2020-21.

4.3.9 The Petitioner submitted that the Commission had approved the sales and revenue at 2,473.57 MU and Rs. 2,049.03 Crore respectively, based on various assumptions with respect to various factors like uninterrupted import of power, supply hours, load shedding hours, power factor, consumption under various time blocks etc., however, the actual sales and revenue vary because of variations in the parameters, based on actual consumption and supply conditions.

4.3.10 The Petitioner submitted that the prevailing Rate Schedule largely comprises of two components viz. demand charge based on connected load irrespective of actual consumption and energy charge which varies directly in proportion to actual consumption of the consumers. Due to power supply, load factor of consumers, and various other reasons, which are beyond the control of the Petitioner, the actual sales, revenue and average billing realization (ABR) as per Accounting Statements have varied as compare to the amount approved in Tariff Order dated 26 August, 2021.

4.3.11 The Petitioner also submitted that it maintains its books of accounts including billing register in SAP-ERP system which is one of the best ERP software and is now being used by many of the distribution companies apart from other business sectors. All billing parameters viz. the details of category / sub-category, rate schedule of the respective category / subcategory, other parameters applicable under each category, general clauses of rate schedule and provisions of Electricity Supply Code are configured in the SAP-ERP only. More than 95% of the meter reading is done through AMR, LPR and CMRI with no manual intervention, hence, the sales and revenue is automatically recorded / computed by the SAP-ERP system. The SAP-ERP generates the billing register for the purpose of preparation of bills, printing thereof, sales & consumers' ledgers and the Petitioner prepares its Accounting Statements on the basis of such system generated sales register only.

4.3.12 The Petitioner submitted that in case of LMV-1 and LMV-5, unmetered sales are accounted based on consumption pattern / use of the electricity in the concerned area. The Petitioner submitted that there are 118 villages in its licensed area, where migrant labour/ encroachers are in abundance and they are often found indulging in theft of electricity. Apart from the above due to ongoing development activities, in many cases, the land though acquired by GNIDA, but continue to be utilised for farming activities by encroachers/ earlier occupants and indulge into pilferage of power, therefore, in order to curb theft of power and T&D Losses, it regularly conducts loss control drives in these areas to remove unauthorized tapings as well as recovery of sales through assessment under Section 126 read with 135 of the Act for unauthorized use/theft of Electricity which otherwise could not be accounted for. The amount so recovered against such cases is being accounted under the same category. Since, these are unauthorized connections, the amount assessed and recovered against electricity theft from such consumers under Section 126 read with 135 of the Act do not get reflected in the number of consumers and their consumption when computed on the basis of only authorised consumer numbers and connected load as mentioned in the forms prescribed by the Hon'ble Commission. It is pertinent to mention here that such assessed and recovered amount is also included in the sales of LMV-1 and LMV-5 categories which the Commission has been wrongly considering as "Excess Sales".

4.3.13 The Petitioner submitted that the above treatment of accounting for assessed consumption in theft cases is in sync with the judgment of the Hon'ble APTEL as held in matter of **Reliance Infrastructure Limited Vs. MERC & Ors. in Appeal No. 85 of 2012** wherein the Hon'ble APTEL held as follows: -

" *7.11 We find that the assessment of electricity charges is made by the Assessing Officer as per the procedure laid down in the 2003 Act, after giving opportunity to the concerned person to file objection, if any, as against the provisional assessment. Only after affording opportunity of hearing to such person, the Assessing Officer passes the final order of assessment of the electricity charges payable by such person. The assessed electricity charges are made by the assessing officer after* *inspection of the premises or after inspection of equipment's, gadgets machines, etc., connected at the premises or after inspection of records. The assessed electricity charges are based on the assessed power/energy consumption and is charged at twice the tariff applicable for the relevant category. Thus, the assessed energy has to be considered as supplied by the distribution licensee to the concerned person.*

7.12 According to the State Commission, only the energy recorded in the meter is required to be considered for computation of distribution loss. We are not in agreement with the contention of the State Commission. A large number of agriculture consumers in the country are still being supplied electricity without meters. The consumption of such unmetered consumers are being assessed by the State Commission and considered as sale to agriculture consumers. The unauthorized use of electricity assessed by the Assessing Officer as per Section 126 of the Act is nothing but consumption of electricity supplied by the distribution licensee.

7.14 ***If the distribution licensee has plugged the energy "leakages" in the system through vigilance initiative, it has not only ensured that the recorded consumption would increase in future but has also ensured that the consumption not recorded in the meter in the past is also retrieved by charging the concerned person for such energy.***

7.15 There is no dispute that the pilfered electricity has also been consumed and has been procured by the distribution licensee for distributing in its licensed area. The pilfered energy has not been recorded in the meter and can only be assessed. Section 126 of the 2003 Act specifically provides for assessment of charges for unauthorized use of electricity. The rate for such charges is at twice the tariff applicable for the relevant category as approved by the State Commission. The charges will have to be worked out by assessment of the electricity consumption by inspection of place or premises, inspection of equipment's, gadgets, etc., found connected or used or after inspection of records, etc. as specified in Section 126 (1) of the Act. Therefore, the assessed energy has to be considered as consumed. If the *licensee has been able to reduce the distribution losses with vigilance drive, it should be given the credit for efficiency gain if it helps in reducing the loss below the target level. Therefore, we hold that the assessed energy as a result of vigilance drive should be accounted for while computing the distribution loss." [Emphasis Supplied]*

4.3.14 The Petitioner submitted the details of the sales booked based on the assessment carried in accordance with the clause of Electricity Supply Code, 2005 as amended and sales booked against theft cases are as shown in Table below:

TABLE 4-6: SALES BOOKED BASED ON NORMATIVE AND SALES BOOKED AGAINST THEFT CASES (FY 2021-22)

Category	MUs	Rs. In Crore
LMV-1		
Sales on normative	8.17	2.82
Sales against theft	-	-
Total LMV-1	8.17	2.82
LMV-5		
Sales on normative	5.60	0.64
Sales against theft	0.07	0.01
Total LMV-5	5.67	0.65

4.3.15 The Petitioner requested the Commission to true-up the actual number of consumers, connected load, sales and revenue for FY 2021-22 including the unmetered sales for LMV-1 and LMV-5 category on the basis of Accounting Statement.

Commission's Analysis

4.3.16 The Commission observed that Number of consumers, connected load and sales increased by 10.99%, 13.49% and 12.48% respectively in FY 2021-22 with respect to FY 2020-21. The Commission vide the Deficiency Note email dated January 10, 2023 sought justification for such variation. In reply, the Petitioner submitted that the increase in Number of Consumers, Sales and Connected Load between FY 2020-21 and FY 2021-22 are in proportionate with each other. The minor variation is due to impact of COVID 19 in FY 2020-21. Further, the actual consumption varies directly in proportionate to load factor/ Consumption pattern of consumers, new connections, load augmentation and various other reasons which are beyond its reasonable control.

4.3.17 The Commission also observed that the overall actual energy sales for FY 2021-22 are less than the approved energy sales in Tariff Order for FY 2021-22 dated August

26, 2021. Though, the overall energy sales for FY 2021-22 have increased by 16.20% from the approved energy sales in the True Up of ARR for FY 2020-21 in Tariff Order dated July 22, 2020. Therefore, the Commission approves the category wise energy sales for FY 2021-22 as given in the table below:

TABLE 4-7: CATEGORY WISE SALES APPROVED BY THE COMMISSION FOR FY 2021-22 (MUs)

Sl. No.	Particular	Tariff Order for FY 2021-22 dated August 26, 2021	Claimed in Petition	Approved Upon Truing Up
1	LMV-1: Domestic Light, Fan & Power	767.63	694.48	694.48
2	LMV-2: Non-Domestic Light, Fan & Power	50.71	41.45	41.45
3	LMV-3: Public Lamps	37.52	37.35	37.35
4	LMV-4: Institutions	19.95	12.25	12.25
5	LMV-5: Private Tube Wells	25.49	14.58	14.58
6	LMV 6: Small and Medium Power	112.72	100.70	100.70
7	LMV-7: Public Water Works	25.13	24.91	24.91
8	LMV-8: STW and Pumped Canals	0.09	0.06	0.06
9	LMV-9: Temporary Supply	44.80	45.96	45.96
10	LMV-11: Electric Vehicle Charging	5.48	0.00	0.00
11	HV-1: Non-Industrial Bulk Power	319.98	216.13	216.13
12	HV-2: Large and Heavy Power	1,064.07	1,150.17	1,150.17
Sub Total		**2,473.58**	**2,338.04**	**2,338.04**

4.3.18 The Category wise number of consumers, connected load and energy sales approved/Trued up for FY 2021-22 by the Commission are shown in the Table below:

TABLE 4-8: CATEGORY WISE NO. OF CONSUMER, CONNECTED LOAD & ENERGY SALES AS APPROVED OF NPCL FOR FY 2021-22

Sl. No.	Category	No. of consumers	Connected Load (MW)	Sales (MU)
1	LMV-1: Domestic Light, Fan & Power	1,06,390	510.13	694.48
2	LMV-2: Non-Domestic Light, Fan & Power	3,649	33.20	41.45
3	LMV-3: Public Lamps	412	11.71	37.35
4	LMV-4: Institutions	526	7.09	12.25
5	LMV-5: Private Tube Wells	1,053	5.26	14.58
6	LMV 6: Small and Medium Power	3,494	83.36	100.70
7	LMV-7: Public Water Works	261	12.06	24.91
8	LMV-8: STW and Pumped Canals	8	0.10	0.06
9	LMV-9: Temporary Supply	837	18.81	45.96
10	LMV-11: Electric Vehicle Charging	0	0	0.00
11	HV-1: Non-Industrial Bulk Power	225	119.57	216.13
12	HV-2: Large and Heavy Power	898	448.95	1,150.17
	Sub Total	**1,17,753**	**1,250.23**	**2,338.04**

4.3.19 The Commission vide Deficiency Note letter dated January 06, 2023 sought clarification from the Petitioner that whether the captive consumption is added in LMV-4 (B) Category. In reply, the Petitioner validates that the captive consumption is added in LMV-4 (B) and submitted the following details:

Table 4-9: SUMMARY OF CAPTIVE CONSUMPTION (FY 2021-22)

Category	Number of Connections (Nos.)	Connected Load (KW)	Self-Consumed Units (MUs)	Revenue (Rs. Crore)
LMV 4 (B)	53	1,050	2.79	2.94

4.3.20 The Commission found that the Petitioner claimed the captive consumption as part of energy sales of the LMV 4(B) category. However, the corresponding revenue considered as NIL for FY 2021-22. The Petitioner also stated that all the captive consumption connections are metered. The Commission, though in the case of State Discoms observed that self / captive consumption is billed under LMV-4(A) / HV-1 category according to Rate Schedule. The same approach is also applied for the self / captive consumption of NPCL. Further, the treatment of the revenue from self- consumption is detailed in revenue section of this order.

4.3.21 The Commission directs the Petitioner to strictly comply with the terms and conditions of tariff and accordingly bill its own consumption. The Commission directs the Petitioner to submit the details of own consumption and treatment of the same in the True-Up of subsequent years.

4.3.22 The energy sales for unmetered categories as per the Norms provided in the Tariff Order of State Discoms for FY 2019-20 dated September 03, 2019 is as shown in table below:

Table 4-10: NORMS FOR NPCL FOR SALES

Category	No. of Consumers (Nos.)	Connected Load/ Contracted Demand (MW)	Total Energy Sales (MU)	Specific Consumption (kWh per kW per month)	Norms Approved by Commission (kWh/KW/Month)	Sales as per Norms approved (MU)	Excess sales booked/sales under booked (MU)
LMV 1 (Dom: Rural Schedule(unmetered)	2,074	5.18	8.17	131.45	144.00	8.95	(0.78)
LMV 5 PTW: Rural schedule(unmetered)	416	1.90	5.67	248.17	140.00	3.20	2.47

4.3.23 The Commission observed that the Petitioner has booked excess sales in LMV-5 (Unmetered) category against the normative approved value and sought justification from the Petitioner vide letter dated January 06, 2023. The Petitioner in its reply submitted that as on April 01, 2021, the no. of unmetered consumers was 662 with a connected load of 3,142 KW whereas at the end of March 31, 2022, the no. of unmetered consumer was 416 with a connected load of 1904 KW and the conversion of unmetered consumers to metered consumers took place during the period of FY 2021-22 i.e. from 1st April to 31st March. Therefore, it will not be appropriate to compute the normative consumption on the no. of consumers and connected load at the end of FY 2021-22 i.e. March 31, 2022 and submitted the following table for consideration.

TABLE 4-11: UNMETERED CONSUMPTION DETAILS SUBMITTED BY THE PETITIONER (IN MU)

Month	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Total
Number of Consumers	660	660	659	646	638	635	633	629	602	534	470	416	**416**
Connected Load (MW)	3.13	3.13	3.13	3.08	3.04	3.02	3.02	2.99	2.85	2.51	2.16	1.90	**1.90**
Norms per KVA per month	183.33	183.33	183.33	183.33	183.33	183.33	183.33	183.33	183.33	183.33	183.33	183.33	**183.33**
Power Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	**0.90**
Norms per KW per month	165	165	165	165	165	165	165	165	165	165	165	165	**165**
Sales as per Norms (MU)	**0.52**	**.52**	**0.52**	**0.51**	**0.50**	**0.50**	**0.50**	**0.49**	**0.47**	**0.41**	**0.36**	**0.31**	**5.60**

4.3.24 The Commission observed that the Petitioner has booked the unmetered categories energy sales as per the Norms approved in Order dated December 09, 2016 (Suo-Moto proceedings in the matter related to "*Revision of consumption norms for unmetered category of consumers*"). This Order was applicable for 5 State Discoms, but as these Discoms cover almost all the State irrespective of regional & demographic variations and other variable parameters, the same norms applied to NPCL also. Later, the Commission in the True-up of ARR of State Discoms for FY 2018-19 disallowed the LMV-5 un-metered category energy sales by considering the Norm as 137.49 kWh/kW/month. The State Discoms filed a Review Petition on the same vide Petition No. 1718 of 2021. The Commission vide Order dated 18.8.2021, elaborated / discussed in detail, the reasons for taking the said Norm was a conscious decision. Though, this Norm was further revised to 140 kWh/kW/month in the Tariff Order of State Discoms for FY 2019-20 dated September 03, 2019.

4.3.25 Thus, the Commission based on the data submitted by the Petitioner, recalculated the excess sales of LMV-5 Unmetered Category for FY 2021-22 as under:

TABLE 4-12: NORMS FOR NPCL FOR SALES

Particulars	**Apr-21**	**May-21**	**Jun-21**	**Jul-21**	**Aug-21**	**Sep-21**	**Oct-21**	**Nov-21**	**Dec-21**	**Jan-22**	**Feb-22**	**Mar-22**	**Total**
Number of Consumers	660	660	659	646	638	635	633	629	602	534	470	416	**416**
Connected Load (MW)	3.13	3.13	3.13	3.08	3.04	3.02	3.02	2.99	2.85	2.51	2.16	1.90	**1.90**

Particulars	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Total
Norms per KW per month	165	165	165	165	165	165	165	165	165	165	165	165	**165**
Sales as per Norms (MU) (as submitted by Petitioner)	**0.52**	**0.52**	**0.52**	**0.51**	**0.50**	**0.50**	**0.50**	**0.49**	**0.47**	**0.41**	**0.36**	**0.31**	**5.60**
Normative Consumption (kWh/KW/Month)	140	140	140	140	140	140	140	140	140	140	140	140	**140**
Sales as per Norms (MU)	0.44	0.44	0.44	0.43	0.43	0.42	0.42	0.42	0.40	0.35	0.30	0.27	**4.75**
Excess Sales with respect to Norms (MU)	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.07**	**0.07**	**0.06**	**0.05**	**0.05**	**0.85**
Excess Sales against theft (MU)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.07**
Total Excess Sales (MU)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.92**

4.3.26 For the purpose of truing up, the Commission is not allowing the excess sales booked with respect to Norms and electricity theft under the LMV-5 unmetered category. The adjustment for the total excess sales is treated with the power purchase cost and elaborated in power purchase section.

4.3.27 It is further observed by the Commission that no separate Billing Determinants for lifeline consumers (in rural as well as urban areas) has been provided by Petitioner due to which the condition of power supply and other norms cannot be verified. The Commission in past had directed the Petitioner in Tariff Order for FY 2021-22 dated August 26, 2021 and in Tariff Order for FY 2022-23 dated July 20, 2022 to provide month-wise, category wise & sub-category wise Billing Determinants & Revenue (actual/projected) details of each year along with their ARR Petition. However, the same has been non-complied by the Petitioner, consistently. The Commission vide Deficiency Note email dated January 10, 2023 sought this information from the Petitioner, in reply the information submitted by the Petitioner is not found satisfactory. It is once again directed by the Commission that the Billing Determinants in future proceedings having category / sub-category / slab / monthwise details shall be provided without any fail, otherwise a stringent penal action will be taken against the Petitioner for repetitive non-compliance of the directive.

4.4 ENERGY BALANCE AND DISTRIBUTION LOSS

Petitioner's Submission

4.4.1 The Petitioner submitted that a Distribution Loss Trajectory for approval of the Commission has been submitted in the Business Plan Petition No. 1526 of 2019, the same is shown in table below:

TABLE 4-13: DISTRIBUTION LOSSES SUBMITTED IN BUSINESS PLAN PETITION No. 1526 OF 2019

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Distribution losses (%)	9.03%	8.35%	8.35%	8.35%	8.35%

4.4.2 The Commission vide Order dated November 26, 2020 has approved the Distribution Loss Trajectory for the Petitioner. The same is given in below table: -

TABLE 4-14: DISTRIBUTION LOSSES APPROVED IN BUSINESS PLAN ORDER

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Distribution losses (%)	7.92%	7.80%	7.70%	7.63%	7.57%

4.4.3 The Petitioner, being aggrieved from the aforesaid Order, filed an Appeal before the Hon'ble APTEL vide Appeal No. 72 of 2021. The Hon'ble APTEL vide judgement dated August 23, 2022 has decided that the license of the Petitioner is valid till June 9, 2029 and remanded back all other issues including Distribution Loss Trajectory raised in the Business Plan Appeal to the Commission for redetermination. Thus, the Distribution Loss Trajectory determined vide the aforesaid judgement of APTEL has been remanded back to the Commission for reconsideration. The relevant part of the Judgement dated August 23, 2022 is reproduced below: -

Quote

For the foregoing reasons as stated above, the captioned Appeal i.e. Appeal No.72 of 2021 has merit and is allowed. The Impugned Order dated 26.11.2020 passed by the Uttar Pradesh Electricity Regulatory Commission (the State Commission) in Petition No. 1526 of 2019 is set aside. We hold that the Licence *of the Appellant shall continue to be valid and subsisting up to 09.06.2029 and direct for all consequential action to be taken by the concerned.*

We remit the matter to the State Commission for a fresh decision on the issues other than the term of Licence as raised before the State Commission through Petition No. 1526 of 2019, considering the term of the Licence up to 09.06.2029.

Needless to say, the State Commission shall ensure that the order it passes pursuant to our directions is scrupulously complied with expeditiously and in a time-bound manner, the issue having persisted for long, we would expect the State Commission to pass the fresh order in terms of above directions expeditiously, not later than three months from the date of this judgment.

The captioned Appeal is disposed of accordingly, including all pending IAs, if any.

Unquote

4.4.4 The Petitioner further submitted that the Commission in the meantime has approved the ARR for FY 2020-21, FY 2021-22 and FY 2022-23 & True Up for FY 2020-21, vide Tariff Order dated December 04, 2020; August 26, 2021 and July 20, 2022 respectively. The Petitioner, being aggrieved from the aforesaid Tariff Orders, has again filed Appeals before the Hon'ble APTEL which are pending for adjudication vide Appeal No. 98 of 2021, 343 of 2021 (since remanded back vide judgement dated 24.11.2022) and 398 of 2022.

4.4.5 The Commission vide Order dated November 22, 2022 has re-assessed and approved the Business Plan and in Para 2.3.44 of the said Order emphasized that losses for FY 2021-22 will be approved in True Up Order for FY 2021-22.

4.4.6 The Petitioner has requested the Commission that its submissions in the instant Petition for the purpose of redetermination of Transmission & Distribution (T&D) losses for FY 2021-22 may please be considered. Further, the Petitioner is making every effort to achieve the T&D loss trajectory as approved by the Commission. Due to outbreak of COVID-19 pandemic and subsequent lockdown, the Petitioner was not able to achieve the loss trajectory during FY 2021-22.

4.4.7 The Commission for FY 2021-22 has approved the Distribution Losses of 7.80% which was affected by most severe and deadliest second and third wave of COVID.

The Petitioner submitted that with its best efforts, it has been able to achieve a Distribution Loss of 7.95%, which is lower than the Loss Levels for previous control period and was not affected by COVID-19 Pandemic.

4.4.8 The Petitioner also submitted that due to COVID-19, the entire load/ demand profile has shifted from HT consumers to LT consumers due to various restrictions imposed by the Central/ State Government. The aggregate T & D Losses is nothing but a summation of T&D Losses at various voltage levels and a shift of sales from HT levels to LT levels the T&D Losses are bound to go up. Thus, the Petitioner requested the Commission to consider the impact of shifting of substantial load/ demand profile from HT consumers to LT due to COVID-19 Pandemic.

4.4.9 The Petitioner submitted that it could not carry out loss containment drives and in the absence of any checks / raids, there was outrageous theft of power by various mischievous means resulting into higher T & D losses.

4.4.10 In addition to the above, the Petitioner submitted that the ground realities such as sparsely populated hence low density of load per square kilometre, falling HT:LT ratio, absence of separate Police Station and dedicated Special Court to deal with the Electricity Theft Cases, rampant political interference etc. has come in the way of containing T&D losses, despite the best efforts and hard work put in by the Petitioner.

4.4.11 Also, the Petitioner submitted that the Commission has duly recognized the difficulties faced by the Distribution Licensees in the COVID-19 pandemic.

4.4.12 The Petitioner requested the Commission to relax the distribution losses in consideration to the impact of COVID-19 Pandemic and the other ground realities explained above and approve the actual T&D losses as shown in table given below:

TABLE 4-15: DISTRIBUTION LOSSES

Sl. No.	Particulars	Unit	FY 2021-22
1	Energy Sales at Diff. Voltage Levels	MU	2,338.04
2	Distribution Loss	%	7.95%
		MU	202.01
3	Energy Import at 33 kV Voltage Level	MU	2,540.05

Commission's Analysis

4.4.13 The Commission observed that the Energy Drawl at Distribution Periphery and Intra-State Transmission losses claim by the Petitioner for FY 2021-22 is not matching with the Monthly Energy Account submitted by UPPTCL. A statement showing the comparative of both is shown in table below:

TABLE 4-16: ENERGY AT DISTRIBUTION PERIPHERY AND INTRA STATE TRANSMISSION LOSSES FOR FY 2021-22

Sr. No.	Particulars	Unit	Claimed in Petition	UPPTCL Statement
1	Energy at distribution periphery	MU	2540.05	2532.44
2	Intra State Transmission Losses	%	3.26%	3.33%

4.4.14 The Commission in Technical Validation Session (TVS) dated February 16, 2023 sought justification and reconciliation of energy statement. The Commission also sought an explanation from the Petitioner that whether the input energy at distribution periphery in the Monthly Energy Account of UPPTCL be considered for True-up of ARR of NPCL for FY 2021-22.

4.4.15 The Petitioner in reply submitted that the total imported energy provided in Form F-13(i) of Appendix-II of the Petition includes the energy procured from (i) Consumers through Net-Metering, (ii) Captive Solar Plants installed at the roof-top of the Company's offices & substations and (iii) LTPPA entered with GNIDA for 1 MW Solar power duly approved by the Commission. Since, these sources are situated within the licensed area of the Petitioner, i.e. Greater Noida, so energy from these plants need to be considered, in additionally to the total procurement through UPPTCL's system, to determine energy availability of the Petitioner for FY 2021-22.

4.4.16 The Petitioner further submitted that, that power procurement for FY 2021-22 is reconciled with the data published by NRLDC energy accounting for FY 2021-22. Further, the Petitioner submitted that the UPSLDC has revised the its energy accounting statements for FY 2015-16 to FY 2021-22 for more than 43 times which include revisions of multiple weeks of preceding periods.

4.4.17 The Commission observed that the auditor appointed by the Commission has made, amongst others, the following observations: -

Quote

2. Observation in relation to electricity units consumed captively as per information provided by the company billing for captive consumption made at a nil rate and quantity directly adjusted with purchase or distribution loss.

3. List of Nil rated billing addresses not provided therefore genuineness of consumption for purpose of electricity distribution cannot be assessed.

4. Units should be shown separately for captive consumption as required for proper accountability and control.

Unquote

4.4.18 The Commission finds that the actual distribution loss as claimed by the Petitioner is inclusive of the captive consumption consumed at different locations.

4.4.19 The Commission observed that the actual Distribution Losses claimed by the Petitioner is higher than the distribution losses approved in the Tariff Order of FY 2021-22 dated August 26, 2021. Thus, for the purpose of truing up of the distribution losses, the Commission has considered the distribution losses approved in Tariff Order of FY 2021-22 dated August 26, 2021 against the actual distribution losses. The same is shown in the table below:

Table 4-17: APPROVED ENERGY BALANCE APPROVED FOR FY 2021-22

Particulars	Unit	Approved vide T.O. 26.08.2021	Claimed in Petition	Approved Upon Truing Up
Energy Sales (MU)	MU	2473.57	**2,338.04**	2338.04
Distribution Loss %	%	7.80%	7.95%	7.80%
Energy Requirement at NPCL Periphery	MU	2682.83	2,540.05	2535.84
Energy purchase from Sources connected at NPCL network	MU	-	-	2.13
Energy available at NPCL Periphery	MU		-	2,533.71
Intra State Losses	%	3.33%	3.26%*	3.33%
Energy Available at network connected at Intra-State Network (UPPTCL)	MU	2775.19	2,625.76	2,620.99
Energy from the sources connected at UPPTCL network	MU	-	-	105.19
Balance Energy requirement from the sources outside the State Periphery	MU	-	-	2,515.80
Inter-State Losses	%	2.99%	3.20%*	3.39%
Energy Purchase at network connected @ Inter-State Network (Ex-bus/PGCIL)	MU		-	2,604.07
Total Power Procurement from all sources	**MU**	**2860.61**	**2,712.48**	**2,711.39**

* *Petitioner has considered the losses on cumulative units, whereas these losses should be applicable to respective sources.*

4.4.20 **The Petitioners are directed to make the submission as per above format in regard to Energy Balance in all future filings**.

4.5 POWER PURCHASE

Petitioner's submission

4.5.1 The Petitioner has claimed power purchase cost for FY 2021-22, in order to meet the demand of the consumers. The Petitioner submitted source wise details of actual power purchase cost in the subsequent paragraphs:

Power Procurement from LTPPA

4.5.2 The Petitioner submitted that during FY 2021-22, procured majority of its power requirement from duly approved Long Term Power Purchase Agreement (LTPPA) with Dhariwal Infrastructure Limited (Genco).

4.5.3 The Genco's plant availability during the year was 87% and based on the consumer's load profile and demand in its license area, the Petitioner has drawn 1,240.06 MU at Ex-Generation Bus and 1,157.35 MU at NPCL Periphery.

4.5.4 The Commission vide its Tariff Order dated August 26, 2021 approved the provisional ARR for FY 2021-22 wherein it approved Fixed Cost and Energy Charges for LTPPA power at Rs. 1.90/unit and Rs. 1.80/unit respectively, while, the Genco raised invoices for the above power on the basis of their last available Tariff Order viz. Tariff Order dated February 05, 2019 wherein it billed Fixed Charges @ Rs. 1.87 per unit and Energy Charges @ Rs. 3.08 per unit (considering allowable variation in CERC escalation rates as per UPERC Generation Tariff Regulations, 2014).

4.5.5 The Petitioner submitted in its Accounting Statement for FY 2021-22 has accounted for the power procured under LTPPA on the basis of invoices raised by Genco as summarized below:

TABLE 4-18: LONG TERM POWER FOR FY 2021-22

Sl.No	Description	UoM	Actual
1	Contracted Quantum at ex-Genco Bus	MW	170
2	No of Days	-	365
3	Hours	-	24
4	Normative Availability	%	85%
5	***Units at Normative Availability***	***MU***	***1265.82***
6	Actual Availability	%	87%
7	Actual Utilisation	%	83%
8	***Units at Ex-Bus***	MU	1240.06
9	Inter-State Losses	%	3.25%

Sl.No	Description	UoM	Actual
10	***Units at UP Periphery***	***MU***	***1197.22***
11	Intra-State Losses	%	3.33%
12	**Units at NPCL**	**MU**	**1157.35**
13	Fixed Cost*	Rs. Crore	233.16
14	Variable Cost *(incl. FSA GST etc.)*. *	Rs. Crore	379.16
15	Inter-State Trans. Charges	Rs. Crore	69.85
16	Intra-State Trans. Charges	Rs. Crore	27.98
17	***Total Cost***	***Rs. Crore***	***710.15***
**Actual amounts are net of rebate*			

4.5.6 The Petitioner submitted that full Fixed Charges have been paid on the basis of plant availability being more than the normative basis of 85% in terms of the UPERC's Generation Tariff Regulations, 2019.Regulation-24 (a) & 26(i) of the above mentioned regulations in this regard is reproduced below: -

Quote

24. Capacity (Fixed) Charge:

…provided full capacity charges shall be recoverable at target availability specified in these regulations….

…..

26. Norms of Operation for Thermal generating stations:

(i) Target Availability (NAPAF) for recovery of full Capacity (Fixed) charges

(a) All thermal power generating stations, except those covered under clause (b) 85%............

Unquote

4.5.7 The above provision is also in sync with the terms of the Long Term PPA which is duly approved by the Commission vide its Order dated April 20, 2016. Relevant extract of the PPA is reproduced below: -

Quote

Article 7.3.9 (a)

………The recovery of full Fixed Charge (Capacity Charge) will be allowed at Target Availability as per UPERC Regulations. Recovery of Fixed Charge below the level of Target Availability shall be on pro rata basis. ….

Unquote

4.5.8 The Petitioner submitted that since, actual plant availability during the year, was at

86.78%, accordingly, it raised bills for full fixed cost @ 85% which has been duly considered in the Accounting Statement for FY 2021-22.

4.5.9 The Commission in its MYT Generation Tariff Order dated February 05, 2019 provisionally approved the Fixed Charges at Rs. 1.90/kWh and Energy Charges at Rs.1.80/kWh at ex-Genco bus excluding the inter-state and intra-state transmission charges and losses and CERC escalation.

4.5.10 Accordingly, the inter-state transmission charges & losses of PGCIL and intra-state transmission charges & losses of UPPTCL had been paid on actual basis based on the MYT Generation Tariff Order dated 05.02.2019 of Genco. Para-4.2.6, 4.2.9, 4.2.10 & 4.2.12 of the Genco's Tariff Order dated 05.02.2019 in this regard are reproduced below:

Quote

*4.2.6 On scrutiny of the computation of levelized tariff it was observed that the levelized tariff has been computed based on the projected values of Energy Charges, PGCIL Charges, PGCIL Losses, Discounting Factor etc**. The levelized tariff submitted by the Petitioner at UP Periphery is as follows Table :***

Table - 10: Comparison of levelized tariff submitted by the Petitioner

Capital Cost (Rs. Crore)	***Levelized Fixed Charges***	***Levelized Energy Charges***	***POC Charges***	***POC Losses***	***Total Levelized Tariff***
1941	***Rs. 1.93 /kWh***	*Rs. 2.21 / kWh*	*Rs. 0.49/kWh*	*Rs. 0.16/kWh*	***Rs. 4.79/kWh***
1927.65	***Rs. 1.88/kWh***	*Rs.2.21/kWh*	*Rs. 0.49/kWh*	*Rs. 0.16/kWh*	***Rs. 4.74/kWh***
1903.58	***Rs. 1.86/kWh***	*Rs.2.21/kWh*	*Rs. 0.49/kWh*	*Rs. 0.16/kWh*	***Rs. 4.73/kWh***

………………

4.2.9 The tariff at UP periphery shall have following components:

(i) Fixed Charges

(ii) Energy Charges

(iii) Inter State transmission Losses

(iv) Inter State transmission Charges

*4.2.10 From above, **it can be observed that the PGCIL charges and losses are beyond the control of the Petitioner, hence are to be reimbursed to the Petitioner as per actuals.** The only fixed component is the fixed charges (treatment of energy charge is discussed subsequently). Therefore, the fixed charges shall be approved as follows:*

- *If levelized Fixed Charge claimed by Petitioner <= Rs. 1.93/kWh then the fixed charges as claimed by the Petitioner shall he approved*
- *If levelized Fixed Charge claimed by Petitioner >Rs. 1.93/kWh, then the fixed charges shall be limited so that the levelized fixed charges does not exceed Rs 1.93/kWh.*

………………

4.2.12 A Comparison of the Fixed charges approved by the Commission with the PPA vis-à-vis claimed by the Petitioner and approved by the Commission in this Order is as show in Table below:

Table - 11: Comparison of Fixed charges as approved in PPA vs claimed by the Petitioner (Rs./kWh)

Particulars	***As per Fixed Charges approved in PPA***	***As claimed in the MYT Petition***	***Revised submission as per capital cost as on Cut-off date***	***Fixed Charges considering Refinancing Cost claimed in FY 2017-18***	***Fixed Charges approved by the Commission***
FY 2016-17	***2.11***	*2.08*	*2.05*	*2.05*	***2.05***
FY 2017-18	***2.06***	*2.02*	*1.94*	*1.99*	***1.99***
FY 2018-19	***2.02***	*1.95*	*1.90*	*1.90*	***1.90***
Levelized Fixed Tariff (25 years)	***1.93***	*1.93*	*1.86*	*1.87*	***1.87***

*…6. The **aforesaid approved rates for recovery of fixed charges are computed on the basis of NAPAF of 85%,** subject to adjustments if any, in terms of Regulation 27 of UPERC Generation Tariff, 2014……*

Unquote

4.5.11 The Petitioner mentioned that the variance in approved power is uncontrollable in nature as the same has been incurred accordance with terms of approved PPAs. This is in line with Regulation 8.1 (d) of MYT Regulations, 2019 as reproduced below: -

Quote:

8.1(d) Variation in the approved cost of power purchase from approved sources, subject to clauses in the power purchase agreement or arrangement approved by the Commission.

Unquote:

4.5.12 Apart from the fixed cost, the Genco also raised bills / credit note towards following components of tariff: -

a. Net Credit note of Rs. 7.03 Crore towards Additional coal for FY 2021-22 in line with Order dated May 06, 2020 in Petition No. 1438 of 2019.
b. Bills for Rs. 5.12 Crore (*net of rebate*) towards Change in Law for FY 2021-22 in line with Order dated May 29, 2020 in Petition No. 1440 of 2019.

4.5.13 The Petitioner has duly considered all the above referred costs in its Accounting Statements and has also claimed the same in its instant True-up Petition as summarized in Table below:

TABLE 4-19: LONG TERM POWER PURCHASE COST FOR FY 2021-22

Supplier	Units at NPCL (MU)	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Total Transmission Charges (Rs. Crore)	Total Cost at NPCL Bus	Landed Rate at NPCL Bus (Rs./kWh)
Long Term Power from Genco	1,157.35	233.16	379.16	97.83	710.15	6.14
Additional Coal (FY 2021-22)	-	-	(7.03)	-	(7.03)	-
Change in Law (FY 2021-22)	-	-	5.12	-	5.12	-
Total	**1,157.35**	**233.16**	**377.25**	**97.83**	**708.24**	**6.12**

4.5.14 The Petitioner submitted that the above expenses have been incurred in compliance of the relevant Regulations, Orders and provisions of the approved PPA and requested to approve the same.

4.5.15 The Petitioner submitted that the Commission vide its Tariff Order dated September 21, 2022 in Genco's MYT Petition no. 1531 of 2019 has determined the tariff for the control period starting from FY 2019-20 to FY 2023-24 in accordance with UPERC Generation Tariff Regulations 2019 wherein it has approved the Fixed Cost @ Rs. 1.813/unit and Energy Cost @ Rs. 2.471/unit. However, since the Commission has approved above increased tariff after elapsing of FY 2021-22 and also as the Petitioner has made the payment thereof in FY 2022-23, the impact of increased tariff for FY 2019-20 to FY 2021-22 pursuant to Tariff Order dated September 21, 2022 has been considered in APR for FY 2022-23.

4.5.16 Furthermore, Genco has filed few more petitions before the Commission which are pending for disposal. The details of the same are as follows:

i. Petition No. 1830/2022 for seeking approval of capital expenditure on account of installation of DE-NOx system as 'Change in Law' event
ii. Petition No. 1798/2021 for truing-up of the ‘Change in Law’ claims of FY 2020-21
iii. Petition No. 1794/2021 for Prudence Check and use of Additional Coal in FY 2020-21
iv. Petition No. 1651/2020 for approval of capital expenditure on account of installation of FGD system as 'Change in Law' event
v. Petition for truing-up of the ‘Change in Law’ claims of FY 2021-22
vi. Petition for Prudence Check and use of Additional Coal in FY 2021-22

4.5.17 Any impact on the power purchase cost pursuant to the orders of the Commission in the above petitions would be consequently claimed by the Petitioner in the ARR / APR/ Truing-up petitions as the case may be.

Impact of GENCO Truing Up Order dated 22.11.21

4.5.18 The Petitioner submitted that the Commission approved the LTPPA vide its order dated April 20, 2016 wherein it approved levelized Tariff @ Rs. 4.79/unit comprising Fixed Cost, Energy Charges and Inter-state transmission charges and losses for a period of 25 years.

4.5.19 The Commission vide the aforesaid order also approved the Genco to raise invoices as per approved Escalation Indices as referred below:

Quote

From the above discussions, it is evident that although NPCL has submitted a commitment on fixed charges for 25 years but has not submitted firm view on variable cost for the term of the PPA as promised by them during the hearing. The undertaking submitted by the generator is only for the period till fuel supply agreement is executed. In view of the fact that whole case of NPCL is based on the levelized tariff of Rs. 4.79/kwh (for the period of 25 years), it becomes necessary to *firm up the fixed as well as the variable part of the tariff. The table showing fixed charges for 25 years and confirmation that there would be no upward revision in the project cost ensures sanctity of fixed charge. Similarly, the component of variable charge also requires to be as per the commitment of levelized tariff of Rs. 4.79/kwh for the period of 25 years* ***except for the variation due to CERC escalation rates, over and above the escalation rates taken in calculation of levelized tariff of Rs. 4.79/kwh, which would be additionally allowed in variable charge.*** *Such limitation on variable charge would mean that for the whole term of PPA if there ever is any short supply from SECL and the Seller has to procure fuel from alternative sources then he would bear the additional cost, if any, over the prevailing SECL price plus CERC escalation. In this manner, the consumer may be ensured to get power at a cheaper rate through this PPA as promised by the parties.*

Unquote

4.5.20 Subsequent to approval of LTPPA and grant of LTOA by PGCIL and UPPTCL, the Petitioner started receiving power under the LTPPA w.e.f. November, 2016 and the Genco billed for the power supplied during FY 2016-17 and FY 2017-18 and the Petitioner claimed the same in its ARR True-up Petitions after netting off the rebate availed by it on prompt payment which was duly approved by the Commission in NPCL's Truing up Orders dated January 19, 2019 and September 03, 2019 as summarized in below Table :

TABLE 4-20: LTPPA BILLS AND CLAIM FOR FY 2016-17 (Rs. Crore)

Particulars	Fixed Cost	Energy Cost	Total
Billed Amount	**21.80**	**16.11**	**37.91**
Rebate Availed	-	0.80	**0.80**
Claimed Amount	**21.80**	**15.31**	**37.11**
Trued-up in TO dt. 19.01.2019	**21.80**	**15.31**	**37.11**
Disallowance of claimed amount	**-**	**-**	**-**

TABLE 4-21: LTPPA BILLS AND CLAIM FOR FY 2017-18 (Rs. Crore)

Particulars	Fixed Cost	Energy Cost	Total
Billed Amount	**260.76**	**197.07**	**457.83**
Rebate Availed	5.96	4.50	10.46
Claimed Amount	**254.80**	**192.56**	**447.36**
Trued-up in TO dt. 03.09.2019	**254.80**	**192.56**	**447.36**
Disallowance of claimed amount	**-**	**-**	**-**

4.5.21 Thereafter, the Commission vide its Order date February 05, 2019, approved the provisional tariff for LTPPA for the period FY 2016-17 to FY 2018-19. The relevant extract of the order is reproduced below: -

Quote

1.2 A Comparison of the Fixed charges approved by the Commission with the PPA vis-à-vis claimed by the Petitioner and approved by the Commission in this Order is as follows in Table :-

TABLE 4-22: COMPARISON OF FIXED CHARGES AS APPROVED IN PPA VS CLAIMED BY THE PETITIONER (RS./KWH)

Particulars	***As per Fixed Charges approved in PPA***	***As Claimed in the MYT Petition***	***Revised submission as per capital cost as on Cut off date***	***Fixed Charges considering Refinancing Cost claimed in FY 2017-18***	***Fixed Charges approved by the Commission***
FY 2016-17	*2.11*	*2.08*	*2.05*	*2.05*	*2.05*
FY 2017-18	*2.06*	*2.02*	*1.94*	*1.99*	*1.99*
FY 2018-19	*2.02*	*1.95*	*1.9*	*1.9*	*1.9*
Levelized Fixed Tariff (25 years)	***1.93***	***1.93***	***1.86***	***1.87***	***1.87***

….

4.2.13 Further, with regard to approval of energy charge, it is observed that he Petitioner has claimed energy charge based on quality of coal as per third party test analysis at plant. Energy charge on account of change in law and additional coal procured other than FSA Coal, will be dealt by the Hon'ble Commission separately vide Commission's Order 19.02.2018. ***On the FSA Grade coal, the Commission had already taken a view in the order dated 20.04.2016 read with Order dated 15.01.2016 while approving the PPA. Accordingly, the commission approves the energy charge same as approved in PPA considering allowable variation in CERC escalation rates and as per Tariff Regulations 2014.*** *Any claim with regard to additional energy charge on account of change in law and additional procurement of coal shall be dealt separately. ………*

4.2.14 The tariff approved above shall be subject to true up provisions based on the Tariff Regulations 2014. DIL will be required to submit all relevant details including actual figures on coal quality (GCV as received basis tested at plant) corresponding to *each FY in the entire control period certified by an independent agency of repute for scrutiny of the Hon'ble Commission while truing up.*

Unquote

4.5.22 Thus, based on above approved rates and after considering coal price escalation as per approved Escalation Indices, the summary of Bills raised by Genco, Amount Claimed in True-up were as follows: -

TABLE 4-23: LTPPA BILLS AND CLAIM (Rs. Crore)

Fin Year	Fixed Cost	Energy Cost	Total
FY 2016-17	-	0.46	**0.46**
FY 2017-18	-	28.54	**28.54**
FY 2018-19	251.90	245.66	**497.55**
Billed Amount	**251.90**	**274.66**	**526.55**
Rebate Availed	-	10.95	10.95
Claimed Amount	**251.90**	**263.71**	**515.61**
Trued-up in TO dt. 04.12.2020	**214.00**	**202.74**	**416.74**
Disallowance of claimed amount	**37.89**	**60.97**	**98.86**

4.5.23 The Petitioner submitted that the Commission disallowed the amount claimed by the Company to the extent of Rs. 98.86 Crore as shown above while truing up the ARR for FY 2018-19 wherein it observed as follows: -

Quote

3.6.32 It can be seen that the per unit cost of power for DIL at NPCL bus has increased vis-à-vis approved in Tariff Order dated January 22, 2019 for FY 2018-19. ***Further, since the True-Up of DIL Petition has not yet been finalized, the fixed and energy charges of Rs.1.90/kWh and Rs. 1.80/kWh respectively as approved in Order dated February 05, 2019 in Petition No. 1235 of 2017 has been considered for FY 2018-19 in this Order. The effect of True-up shall be considered as and when it happens.***

Unquote

4.5.24 Thereafter, now during FY 2021-22, the Commission vide its order dated November 22, 2021 has trued up the ARR and Tariff for FY 2016-17 to FY 2018-19, wherein it has approved the whole amount as billed by the Genco.

4.5.25 The Petitioner further requested the Commission to give effect of the GENCO's Truing up Order dated November 22,2021 and allow the aforesaid claim of Rs. 98.86 Crore along with carrying cost in the respective years as claimed by the

Petitioner earlier. The Summary of amounts billed, claimed and approved in NPCL Truing-up and Genco's Truing-up is provided below Table:

TABLE 4-24: SUMMARY OF IMPACT OF GENCO'S TRUE-UP ORDER DATED 22.11.2021 (Rs. Crore)

Particulars	Ref.	FY 2016-17	FY 2017-18	FY 2018-19	Total
Approved in Genco's TO dt. 22.11.2021	a	**37.95**	**486.64**	**499.07**	**1,023.66**
Less: Amount Billed by Genco after TO dt. 22.11.2021	b	0.04	28.81	(27.48)	**1.37**
Amount Billed by Genco before TO dt. 22.11.2021	c=a-b	**37.91**	**457.83**	**526.55**	**1,022.29**
Less: Rebate availed	d	0.80	10.46	10.95	**22.21**
Net Amount Claimed in NPCL's True-up Petitions	**e=c-d**	**37.11**	**447.36**	**515.61**	**1,000.08**
Amount Trued-up in NPCL's True-up Orders	f	37.11	447.36	416.74	**901.22**
Remaining Arrears to be approved with Carrying Cost	**g=e-f**	**-**	**-**	**98.86**	**98.86**

4.5.26 It may be seen from the above that the Petitioner had claimed net expenditure of Rs. 1,000,08 Crore incurred by it based on invoice raised by the Genco in FY 2016-17 to FY 2018-19, however, the Commission approved an amount of only Rs. 901.22 Crore against the said claim stating the pendency of truing up of the ARR. At present since, the Commission has trued-up the ARR for FY 2016-17 to FY 2018-19, wherein it has fully approved the claimed amount of Rs. 1,000.08 Crore (net of rebate) as evident from the relevant extract of the Order dated November 22, 2021 reproduced below: -

Quote

2.6.2 The Trued up ARR for FY 2016-19 has been worked out to Rs. 1023.66 Crs against the approved ARR of Rs. 1022.56 Crs in terms of MYT order dated 05.02.2019. Accordingly, the Commission directs NPCL to make payment to DIL of the Revenue Gap amount of Rs.1.1 Crores in six equal monthly instalments starting from the date of issuance of this order, along with applicable Carrying Cost (simple interest) till the date of this order in compliance with Regulations 6 (9) of Generation Tariff Regulations 2014 ….

Regarding the carrying cost claimed by DIL, on the difference with respect to payment made by NPCL, it is clarified that difference between billing by DIL based on MYT order dated 05.02.2019 and payments released by NPCL in respect of those bills falling due for payment is covered by the Regulations 30 of the UPERC Regulations, 2014.

Unquote

4.5.27 The Petitioner requested the Commission to approve the arrear of Rs. 98.86 Crore in True-up ARR for FY 2021-22 in the respective years as billed by the Genco and claimed by the Petitioner in its respective truing-up petition.

4.5.28 Further, considering the Commission's Tariff Order dated Feb 05, 2019 and the bills raised by the Genco, the Company has also paid the aforesaid differential amount of Rs. 98.86 Crore partly during FY 2016-17 to FY 2019-20 based on then prevailing tariff / orders and remaining in November, 2021 after pronouncement of aforesaid Genco's True-up Order dated November 22, 2021. The Petitioner has paid an interest of Rs. 19.57 Crore on part of the arrear finally paid in November, 2021 as stated vide true-up Order dated November 22, 2021. Therefore, as per the true-up Order dated November 22, 2021, as the Company has actually incurred the aforesaid amount of Rs. 98.86 Crore to GENCO in the respective years of the Control period from FY 2016-17 to FY 2018-19 and therefore, it is requested to approve the carrying cost thereon as computed below:

TABLE 4-25:* COMPUTATION OF CARRYING COST ON GENCO ARREAR *(Rs. Crore)

Period	Arrear Amount	ROI	Carrying Cost
FY 2018-19	98.86	14.57%	7.20
FY 2019-20	98.86	14.46%	14.29
FY 2020-21	98.86	9.57%	9.46
Total	**98.86**		**30.96**

4.5.29 Apart from above, the Commission has approved following additional cost in aforesaid Truing up Order dated November 22, 2022 which has been billed by the Genco and accordingly, submitted as herein below by the Company for approval of the Commission in FY 2021-22 as shown below:

TABLE 4-26:* ADDITIONAL COST APPROVED IN TARIFF ORDER DATED 22.11.2021 *(Rs. Crore)

Item	Amount
Incremental O&M Expenditure for FY 2016-17 to FY 2017-18	2.73
Carrying Cost on Additional Coal Charges for FY 2017-18 and FY 2018-19	13.62
Carrying Cost on Change in Law Charges for FY 2016-17 to FY 2018-19	9.01
Total	**25.35**

4.5.30 Accordingly, based on aforesaid discussion the summary of impact of Genco's Truing-up Order dated November 22, 2022 as claimed in the Company's True-up ARR for FY 2021-22 is as follows in Table:

***TABLE 4-27:* NET IMPACT OF TARIFF ORDER DATED 22.11.2021**

(Rs. Crore)

Item	Amount
Arrear against bills raised by Genco before T.O. dt. 22.11.2021	98.86
Carrying Cost on above	30.96
Arrear against bills raised by Genco after T.O. dt. 22.11.2021	1.37
Carrying Cost on above as approved in T.O. dt. 22.11.2021	0.45
Incremental O&M Expenditure	2.73
Carrying Cost on Additional Coal Charges for FY 2017-18 and FY 2018-19	13.62
Carrying Cost on Change in Law Charges for FY 2016-17 to FY 2018-19	9.01
Subtotal	**156.99**
Less: Rebate on above	1.92
Subtotal	**155.07**

4.5.31 The Petitioner requested that the above expenses have been incurred in compliance of the relevant Regulations, Orders of the Commission and provisions of the approved PPA and the same may be allowed by the Commission.

Power Purchase from Medium Term Sources:

4.5.32 The Petitioner submitted that it has tied-up following Medium Term Power through Competitive Bidding on DEEP Portal in accordance with the Guidelines of Central Government in Table below:

***TABLE 4-28:* MEDIUM TERM PPAS DATED 23.01.2020**

Seller	Capacity	Duration	Period	Composite Tariff at NPCL (Rs./kWh)	Nature
APPCPL (DoP, GoAP)	50 MW	RTC	Apr-Sep	5.46*	Large Hydro
	25MW	4 Hrs	Oct-Nov		
	25MW	2 Hrs	Dec-Mar		
APPCPL (DoP, GoN)	25 MW	RTC	Apr-Sep		
	25MW	4 Hrs	Oct-Nov		
	25MW	2 Hrs	Dec-Mar		
*Note: Composite tariff of APPCPL (DoP, GoAP) comprises Cost of fixed and variable harges of Rs. 2.09 per kWh, Cost of Transmission Charges of Rs. 1.00 per kWh and Cost of Transmission Losses of Rs. 0.28 per kWh while Composite tariff of APPCPL (DoP, GoN) comprises Cost of fixed and variable charges of Rs. 2.085 per kWh, Cost of Transmission Charges of Rs. 0.99 per kWh and Cost of Transmission losses of Rs. 0.30 per kWh.					

TABLE 4-29: **Medium Term PPAs dated 30.12.2020 & 31.12.2020**

Source	Capacity	Duration	Period	Composite Tariff at NPCL (Rs./kWh)	Nature
TPTCL (GoHP, H.P.)	45 MW	RTC	May-Sep	4.43*	Large Hydro
APPCPL (GEL, H.P.)	15 MW	RTC	May-Sep		
**Note: Composite tariff of TPTCL (GoHP) comprises Cost of fixed and variable charges of Rs. 1.661 per kWh, Cost of Transmission Charges of Rs. 0.7978 per kWh and Cost of Transmission Losses of Rs. 0.31 per kWh while Composite tariff of APPCPL (GEL) comprises Cost of fixed and variable charges of Rs. 1.695 per kWh, Cost of Transmission Charges of Rs. 0.79 per kWh and Cost of Transmission losses of Rs. 0.25 per kWh.*					

4.5.33 The Petitioner submitted that the tariff discovered through bidding shown in above Table i.e. Rs. 5.46 per unit landed at NPCL Periphery based on then prevailing transmission charges and losses, was duly approved by the Commission vide Order February 02, 2020 along with respective medium-term power purchase agreements. Similarly, the tariff discovered through bidding shown in above Table i.e. Rs. 4.43 per unit landed at NPCL Periphery was also based on the then prevailing transmission charges and losses in terms of the bid documents. The above tariff along with the PPAs dated 30.12.2020 and 31.12.2020 were duly approved by the Commission vide Order May 10, 2021.

4.5.34 The transmission charges and losses, components of the tariffs quoted by APPCPL and TPTCL were based on then prevailing transmission charges and losses, however, the same has to be paid on actuals in accordance with Article 5.5 and 5.6 of the above approved PPAs dated January 23, 2020, December 30, 2020 and December 31, 2020. The relevant extract of the MTPPA is reproduced below:

Quote

5.5 Obligations relating to transmission charges

The Supplier shall be liable for payment of all charges, due and payable under Applicable Laws, for inter-state and intra-state transmission of electricity from the Point of Grid Connection to the Delivery Point. For the avoidance of doubt, the Parties expressly agree that inter-state and intra-state transmission of electricity shall be undertaken solely at the risk and cost of the Supplier and all liabilities arising out of any failure of inter-state and intra-state transmission shall, subject to the provisions of Clause 11.4.4, be borne by the Supplier. ***The Parties further agree that the obligation of the Supplier to pay the regulated charges for transmission of electricity shall be restricted to the tariffs and rates applicable on the Bid Date for and in respect of the Contracted Capacity and any differential arising from***

revision of the regulated tariffs and rates thereafter shall be payable or recoverable, as the case may be, by the Utility…

….

5.6 Obligations relating to transmission losses

5.6.1 The Supplier shall be liable for the transmission losses in all inter-state and intra- state transmission of electricity from the Point of Grid Connection to the Delivery Point. For the avoidance of doubt, the Parties expressly agree that transmission of electricity shall be undertaken solely at the risk and cost of the Supplier and all liabilities arising out of any transmission losses on inter-state and intra-state transmission lines shall be borne by the Supplier. ***The Parties further agree that the obligation of the Supplier to bear the transmission losses shall be restricted to the level of losses determined by the Central Commission as on the Bid Date for this Project and any differential (higher or lower) arising from revision in the level of losses thereafter by the Central Commission shall be borne by the Utility……..***

Unquote

4.5.35 The Petitioner submitted that based on the applicable transmission charges and losses for Inter-State and Intra-State Transmission Utilities, the Petitioner procured 434.78 MU power in aggregate through above sources at the landed cost of Rs 4.59/kWh at NPCL Periphery as summarized below in below Tables:

***TABLE 4-30:* MEDIUM TERM POWER PURCHASE COST FROM GOVT. of AP FOR FY 2021-22**

Sl. No.	Description	UoM	Actual
1	Contracted Quantum at NPCL		
	a. Apr-Sep	*MW*	*50*
	b. Oct-Nov	*MW*	*25*
	c. Dec-Mar	*MW*	*25*
2	No of Days	-	
	a. Apr-Sep	*Days*	*183*
	b. Oct-Nov	*Days*	*61*
	c. Dec-Mar	*Days*	*121*
3	Hours	-	
	a. 00:24 hrs from Apr-Sep	*Hrs*	24
	b. 18:22 hrs from Oct-Nov	*Hrs*	4
	c. 18:20 hrs from Dec-Mar	*Hrs*	2
4	Normative Availability	%	85%
5	***Units at Normative Availability***	***MU***	***196.99***
6	Utilisation of Capacity	%	88%
7	***Units at Ex-Bus***	***MU***	***205.86***
8	Inter-State Losses	%	3.24%
9	***Units at UP Periphery***	***MU***	***199.19***

Sl. No.	Description	UoM	Actual
10	Intra-State Losses	%	3.33%
11	***Units at NPCL***	***MU***	***192.56***
12	Fixed Cost	Rs. Crore	41.29
13	Variable Cost	Rs. Crore	46.11
14	Inter-State Trans. Charges	Rs. Crore	5.26
15	Intra-State Trans. Charges	Rs. Crore	4.84
16	***Total Cost***	***Rs. Crore***	***97.5***

TABLE 4-31: **MEDIUM TERM POWER PURCHASE COST FROM GOVT. of NAGALAND FOR FY 2021-22**

Sl. No.	Description	UoM	Actual
1	Contracted Quantum at NPCL	MW	
	a. Apr-Sep	*MW*	*25*
	b. Oct-Nov	*MW*	*25*
	c. Dec-Mar	*MW*	*25*
2	No of Days	-	
	a. Apr-Sep	*Days*	*183*
	b. Oct-Nov	*Days*	*61*
	c. Dec-Mar	*Days*	*121*
3	Hours	-	
	a. 00:24 hrs from Apr-Sep	*Hrs*	24
	b. 18:22 hrs from Oct-Nov	*Hrs*	4
	c. 18:20 hrs from Dec-Mar	*Hrs*	2
4	Normative Availability	%	85%
5	***Units at Normative Availability***	***MU***	***103.66***
6	Actual Utilisation	%	87%
7	***Units at Ex-Bus***	***MU***	***106.33***
8	Inter-State Losses	%	3.25%
9	***Units at UP Periphery***	***MU***	***102.87***
10	Intra-State Losses	%	3.33%
11	***Units at NPCL***	***MU***	***99.45***
12	Fixed Cost	Rs. Crore	21.68
13	Variable Cost	Rs. Crore	23.84
14	Inter-State Trans. Charges	Rs. Crore	0.06
15	Intra-State Trans. Charges	Rs. Crore	2.61
16	***Total Cost***	***Rs. Crore***	***48.2***

TABLE 4-32: MEDIUM TERM POWER PURCHASE COST FOR M/S GOODWILL FOR FY 2021-22

S. No.	Description	UoM	Actual
1	Contracted Quantum at NPCL (May-Sep)	*MW*	*15*
2	No of Days (May-Sep)*	*Days*	*108*
3	Hours	*Hrs*	24
4	Normative Availability	%	85%
5	***Units at Normative Availability***	***MU***	***33.05***
6	Actual Utilisation	%	88%
7	***Units at Ex-Bus***	***MU***	***35.40***
8	Inter-State Losses	%	2.90%
9	***Units at UP Periphery***	***MU***	***34.37***
10	Intra-State Losses	%	3.33%
11	***Units at NPCL***	***MU***	***33.22***
12	Fixed Cost	Rs. Crore	5.56
13	Variable Cost	Rs. Crore	6.40
14	Inter-State Trans. Charges	Rs. Crore	0.01
15	Intra-State Trans. Charges	Rs. Crore	0.90
16	***Total Cost***	***Rs. Crore***	***12.87***
** Power scheduled from 15th Jun'21 subsequent to the approval of Hon'ble Commission vide order dated 10.05.2021 and lower power demand on account of second wave of Covid-19 in mutual agreement with supplier.*			

TABLE 4-33: MEDIUM TERM POWER PURCHASE COST FOR M/S GOHP FOR FY 2021-22

S. No.	Description	UoM	Actual
1	Contracted Quantum at NPCL (May-Sep)	*MW*	*45*
2	No of Days (May-Sep) *	*Days*	*108*
3	Hours	*Hrs*	24
4	Normative Availability	%	85%
5	***Units at Normative Availability***	***MU***	***99.14***
6	Actual Utilisation	%	99%
7	***Units at Ex-Bus***	***MU***	***117.02***
8	Inter-State Losses	%	3.16%
9	***Units at UP Periphery***	***MU***	***113.32***
10	Intra-State Losses	%	3.33%
11	***Units at NPCL***	***MU***	***109.55***
12	Fixed Cost	Rs. Crore	17.25
13	Variable Cost	Rs. Crore	20.76
14	Inter-State Trans. Charges	Rs. Crore	0.01
15	Intra-State Trans. Charges	Rs. Crore	2.88
16	***Total Cost#***	***Rs. Crore***	***40.90***
** Power scheduled from 15th Jun'21 subsequent to the approval of Hon'ble Commission vide order dated 10.05.2021 and lower power demand on account of second wave of Covid-19 in mutual agreement with supplier.*			

4.5.36 The variance in above approved power is uncontrollable in nature as the same has been incurred accordance with terms of approved PPA. This is in line with Regulation 8.1 (d) of MYT Regulations, 2019 as reproduced below:

Quote

8.1(d) Variation in the approved cost of power purchase from approved sources, subject to clauses in the power purchase agreement or arrangement approved by the Commission.

Unquote

4.5.37 As per Article 11.4.2 of the above approved Medium-Term Agreements with M/s APPCPL and M/s TPTCL, full fixed charges are to be paid if the actual availability of the plant is more than Normative Availability of 85% and if the scheduled generation by the suppliers is more than 85% then it is also eligible for incentives as per Article 11.6.1. of the approved PPA.

4.5.38 The Petitioner submitted that based on Article 11.6.1, M/s TPTCL (Source: GoHP) and M/s APPCPL (Source: GEL, H.P.) has claimed incentives as the dispatched power towards their availability was 93.92% and 85.45%, respectively. Accordingly following incentive has been claimed by suppliers and also paid by the Company show in below Table below:

TABLE 4-34: **INCENTIVE CLAIMED FOR M/S GOHP FOR FY 2021-22**

Sellers	Contracted Units at NPCL (MU)	85% of Contracted Capacity (MU)	Despatched Units at NPCL (MU)	Incentive Units (MU)	Fixed Charges (Rs./kWh)	Incentive @ 50% of Fixed Charge (Rs./kWh)	Amount (Rs. Crore)
TPTCL-GoHP	116.64	99.14	109.55	10.40	1.669	0.835	0.87
APPCPL-GEL	38.88	33.05	33.22	0.18	1.695	0.848	0.01

4.5.39 Accordingly, the Petitioner submitted the summary of power procured from approved Medium-Term Sources during FY 2021-22 is as provided in Table below:

TABLE 4-35:MEDIUM TERM POWER PURCHASE COST **FOR FY 2021-22**

Seller	Units at NPCL (MU)	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Total Transmission Charges (Rs. Crore)	Total Cost at NPCL Bus	Landed Rate at NPCL Bus (Rs./kWh)
APPCPL- Govt. of AP	192.56	41.29	46.11	10.1	97.5	**5.06**
APPCPL- Govt. of Nagaland	99.45	21.68	23.84	2.67	48.2	**4.85**
APPCPL- GEL, HP	33.22	5.56	6.40	0.91	12.87	**3.87**
TPTCL- Govt of HP	109.55	17.25	20.76	2.9	40.9	**3.73**
Total	**434.78**	**85.79**	**97.10**	**16.57**	**199.46**	**4.59**

Power Procurement from Short-Term Sources:

4.5.40 The Petitioner has submitted that, for the purpose of procurement of power for FY 2021-22 to meet the demand of the consumers, the Petitioner conducted competitive bidding on DEEP portal from time to time and submitted the results thereof to the Commission for adoption of tariff and approval of PPA. The summary of Short Term PPAs approved by the Commission is provided in Table below:

***TABLE 4-36:APPROVED SHORT TERM POWER PURCHASE AGREEMENTS* FOR FY 2021-22**

Seller	Period	Duration	MW	Rate at CTU Periphery of Seller (Rs./kWh)	Approval Date
APPCPL (HSPPL, H.P.)	11-31 Oct'21	00-24 Hrs.	50	6.89	25.10.2021
	01-09 Nov'21	00-24 Hrs.	50	6.39	
APPCPL (Sembcorp Energy, A.P.)	11-31 Oct'21	00-24 Hrs.	50	6.89	
	01-09 Nov'21	00-24 Hrs.	35	6.40	
TPTCL (JPL, Chattisgarh)	11-31 Oct'21	00-24 Hrs.	60	6.90	
	01-09 Nov'21	00-24 Hrs.	50	6.77	
TPTCL (PPGCL, U.P.)	Feb'22 (excl. Sunday)	09-18 Hrs	5	3.98	07.02.2022
	Mar'22 (excl. Sunday)	09-18 Hrs	15	3.98	
	Feb'22 (excl. Sunday)	18-24 Hrs.	50	4.86	
	Mar'22 (excl. Sunday)	18-24 Hrs.	50	5.09	
PTC (Singroli Bhatwari HEP, Uttarakhand)	Feb'22 (excl. Sunday)	18-24 Hrs.	25	4.86	
PTC (JPL, Chhattisgarh)	Feb'22 (excl. Sunday)	09-18 Hrs	50	3.97	
	Mar'22 (excl. Sunday)	09-18 Hrs	50	3.97	
APPCPL (Semcorp Energy, A.P.)	Feb'22 (excl. Sunday)	18-24 Hrs.	20	4.90	
	Mar'22 (excl. Sunday)	18-24 Hrs.	55	5.10	

4.5.41 The Petitioner submitted that in aggregate it procured 119.58 MU at Rs. 6.55 per unit from approved short term PPAs as detailed in below Table:

***TABLE 4-37:SHORT TERM POWER PURCHASE* FOR FY 2021-22**

Sellers	Units at NPCL (MU)	Energy Charges (Rs. Crore)	Transmission Charges (Rs. Crore)	Total Cost at NPCL Bus	Landed Rate at NPCL Bus (Rs./kWh)
APPCPL (HSPPL, H.P.)	22.62	15.93	0.59	16.52	7.30
APPCPL (Sembcorp Energy, A.P.)	22.68	16.3	0.65	16.95	7.47
TPTCL (JPL, Chattisgarh)	32.8	23.26	0.98	24.24	7.39
TPTCL (PPGCL, U.P.)	13.20	6.35	0.37	6.72	5.09
PTC (Singroli Bhatwari HEP, Uttarakhand)	2.10	1.07	0.06	1.13	5.41
PTC (JPL, Chhattisgarh)	16.69	6.96	0.47	7.43	4.45
APPCPL (Semcorp Energy, A.P.)	9.49	5.05	0.28	5.33	5.61
Total	**119.58**	**74.94**	**3.40**	**78.32**	**6.55**
Power Purchase from Exchange	559.30	333.09	14.55	347.65	6.22
Total	**678.88**	**408.03**	**17.95**	**425.97**	**06.27**

4.5.42 The Petitioner submitted that in line with direction of the Commission, the Petitioner met its remaining power requirement of 559.30 MU through purchase from Power Exchange at average cost of Rs. 6.22 per unit.

4.5.43 The Petitioner submitted thus, the overall procurement of power from short term sources during FY 2021-22 was 678.88 MU at average cost of Rs. 6.27 per unit which is given in Table here in below for the kind perusal and approval of the Commission

***TABLE 4-38:SHORT TERM POWER PURCHASE* FOR FY 2021-22**

Description	Approved T.O 26th Aug'21			Actual		
	Units	Rate/kWh	Amount	Units	Rate/ kWh	Amount
APPCPL (Source-HSPPL)	Approved after release of T.O 26.08.2021			22.62	7.3	16.52
APPCPL (Source-SEMCORP)				22.68	7.47	16.95
TPTCL (Source-JPL)				32.8	7.39	24.24
TPTCL (Source- PPGCL)				13.2	5.09	6.72
PTC (Source- Singroli Bhatwari HEP)				2.1	5.41	1.13
PTC (Source- JPL, Chhattisgarh)				16.69	4.45	7.43
APPCPL (Source- Semcorp Energy)				9.49	5.61	5.33
Subtotal	**-**	**-**	**-**	**119.58**	**6.55**	**78.33**
Power Exchange	454.05	4.08	185.12	559.3	6.22	347.65
Total	**454.05**	**4.08**	**185.12**	**678.88**	**6.27**	**425.97**

Power Procurement from Renewable Sources

4.5.44 The Petitioner submitted that during FY 2021-22, the Petitioner procured 227.83 MU power from long term and short-term renewable sources as per the following details: -

4.5.45 The Petitioner submitted that 1.22 MU @ Rs. 6.92 per kWh was procured from Long Term Power Purchase Agreement for 1 MWp Solar power with Greater Noida Industrial Development Authority (GNIDA) as per the PPA approved by the Commission vide its order dated July 14, 2015. Further, 32.04 MU @ Rs. 3.82 per kWh procured from Long Term Power Purchase Agreement for 10 MW Wind power with PTC India Limited signed on June 27, 2017 duly approved by the Commission vide its Order Dated January 05, 2018.

4.5.46 The Petitioner submitted that 9.13 MU @ Rs. 7.85 per kWh procured from the net-metered consumers having Net-metering agreements for around 24 MW solar power. It is submitted that for the purpose of true and fair presentation of the financial statements of the Company, in accordance with the matching principle of accounting, it is imperative to show the impact of 9.13 MU received from the rooftop solar PV system in total power purchased by the Company as well as to show the value of 9.13 MU energy supplied from NPCL's Grid to such consumers billed on net basis in the subsequent period in Revenue. Therefore, the Petitioner has determined the value of 9.13 MU supplied to the consumers from the NPCL Grid (which were not billed pursuant to RSPV Regulation, 2019) at the Quarterly

Average Energy Charges of the respective consumer's tariff category. Accordingly, based on above, the Petitioner has considered Rs. 7.16 Crore as cost of 9.13 MU power purchased from Net-metering and also included in Sales the corresponding value of 9.13 MU energy supplied by the Company to such consumers from the NPCL Grid (which were billed on net basis pursuant to RSPV Regulation, 2019) in the respective consumer's tariff category. Thus, based on the above accounting treatment of Net-Metered Energy Injected to NPCL Grid, the Petitioner has essentially included in the Power Purchase cost as well as the Billed Revenue with the same value of Rs. 7.16 Crore keeping the net impact on ARR and Revenue as neutral.

4.5.47 The Petitioner submitted that in order to meet its RPO obligation entered into an agreement on 06.01.2017 with M/s APPCPL for procurement of entire power generated from the Rooftop Solar Generating Plant of 370 +/-20% KWp at the Rooftops of the Appellant's 33/11 kV Substations located in Greater Noida. The Tariff agreed between the parties was based on the then discovered rate in UP State's tender for setting up of 500 MW Rooftop Solar PV Project by Solar Energy Corporation of India Ltd (SECI). Accordingly, the Company vide its letter no. P-77A/ 249 dated 27.10.2016 submitted to the Commission that the installation of rooftop Solar PV projects on its various sub-stations / office buildings will also enable the Company in executing its DSM Plan. Subsequently, the Petitioner vide letter no. P-77A/314 dated 17.03.2017 duly intimated the Commission after execution of the agreement as well as reiterated the same during various suo-moto proceedings held by the Commission for fulfilment of RPO Obligations by DISCOMs in UP. Copies of Letter dated 27.10.2016 and 17.03.2017 are annexed hereto and collectively marked as Annexure-7. Further, aforesaid power procurement was also duly approved by the Commission while approving the Business Plan vide its MYT Order dated 30.11.2017 and also while approving ARR for FY 2018-19 and ARR for FY 2019-20 vide Tariff Orders dated 22.01.2019 and 03.09.2019 respectively. It was also approved while truing-up ARR for FY 2016-17, ARR for FY 2017-18 and ARR for FY 2018-19 vide Tariff Orders dated 22.01.2019, 03.09.2019 and 04.12.2020 respectively. During FY 2021-22, the Company procured 0.41 MU @ Rs. 5.13/ kWh.

i) Long Term Power Purchase Agreement for 25 MW Solar power each have been signed with M/s Tata Power and M/s Adani Energy which have been duly approved by the Commission vide its order dared September 18, 2019 and the Petitioner has estimated to procure long-term solar power of 4.64 MU @Rs 3.24/ kWh from Tata power w.e.f November 27, 2021 and 51.81 MU@Rs 3.24/kwh from Adani Solar for FY 2022-23.

a) It is pertinent to mention here that M/s Tata has filed Petition No. 1711/2021 before the Commission seeking additional cost due to alleged Change in Law events. M/s Adani Solar has also filed similar Petition No. 1741/2021 seeking additional cost on account of alleged Change in Law events. Appropriate modifications would be made in power purchase cost based on the directions of this Hon'ble Commission.

b) M/s Adani Solar has also filed a Petition No. 1753/2021 before the Commission seeking additional cost due to alleged scheduling of power from 06.01.2021 to 04.04.2021. Appropriate modifications would be made in power purchase cost based on the directions of this Hon'ble Commission in the above matter.

4.5.48 Further, based on the requirement of power to meet demand of the consumers as well as RPO Obligation, the Petitioner conducted competitive bidding on DEEP portal and submitted the results thereof to the Commission for adoption of tariff and approval of PPA. The summary of Short Term PPAs approved by the Commission is provided in Table below: -

***TABLE 4-39: APPROVED SHORT TERM RE NON SOLAR POWER AGREEMENTS* FOR FY 2021-22**

Seller	Period	Duration	MW	Rate at CTU Periphery of Seller (Rs./kWh)	Approval Date
APPCPL- (DoP, GoAP)	Apr-Sep-21 (Excl. Sunday)	19-24 Hrs.	10	4.44	20.04.2021
APPCPL- (DoP, Nagaland)	Apr-Sep-21 (Excl. Sunday)	00-04 Hrs.	12	4.30	
APPCPL- (MePDCL, Meghalaya)	Apr-Sep-21 (Excl. Sunday)	00-04 Hrs.	15	4.30	
	May-Sep-21 (Excl. Sunday)	12-17 Hrs.	15	4.32	
	Apr-Sep-21 (Excl. Sunday)	19-24 Hrs.	15	4.44	
KEIPL- (E&PD, Govt of Sikkim)	Apr-Sep-21 (Excl. Sunday)	00-04 Hrs.	5	4.30	
	May-Sep-21 (Excl. Sunday)	12-17 Hrs.	10	4.31	
	Apr-Sep-21 (Excl. Sunday)	19-24 Hrs.	10	4.44	

4.5.49 The Petitioner submitted that subsequent to receiving approval from the Commission, the Petitioner procured 54.65 MU power from above-referred PPAs as summarized below Table:

***TABLE 4-40: RENEWABLE POWER AGREEMENTS* FOR FY 2021-22**

Description	Actual		
	Units	Rate/ kWh	Amount
Solar Power (GNIDA)	1.22	6.92	0.84

Description	Actual		
	Units	Rate/ kWh	Amount
Solar Power (APPCPL)	0.41	5.13	0.21
Solar Power (Adani)	51.81	3.24	16.81
Solar Power (Tata)	4.64	3.24	1.50
Solar Power (Net Metering)	9.13	7.85	7.16
Wind Power (PTC)	32.04	3.82	12.24
APPCPL- (Source- DoP, GoAP)	6.44	4.97	3.20
APPCPL- (Source- DoP, Nagaland)	6.24	4.84	3.02
APPCPL- (Source- MePDCL, Meghalaya)	26.74	4.84	12.95
KREATE- (Source- E&PD, Govt of Sikkim)	15.23	4.85	7.39
Subtotal	**54.65**	**4.86**	**26.56**

4.5.50 The cost of short-term power from M/s APPCPL and M/s Kreate has increased marginally on account of change in transmission charges and losses. As per UPERC's approved PPAs vide order dated 20.04.2021 for the above said sources, the change in transmission charges and losses along with other open access charges are to be borne by the Petitioner. The relevant Clause No. 5 of the approved PPAs dated 18.02.2021 and 23.02.2021 are reproduced below:

Quote

5. Transmission Charges (POC Charges) & Transmission Losses (POC Losses):

All Open Access charges & losses up to the Delivery Point i.e. intra-state transmission charges & losses, scheduling & operating charges along with application/consent fee of SLDC for the Seller's State shall be borne by the Bidder. All other charges & losses beyond the Delivery Point i.e. CTU/PGCIL transmission charges & losses, scheduling & operating charges of any intervening RLDC, application fee of NRLDC, consent fee of UPSLDC, scheduling & operating charges of UPSLDC along with U.P. State transmission charges & losses shall be borne by the NPCL……..

Unquote

4.5.51 It is also pertinent to mention here that the variance in approved power is uncontrollable in nature as the same has been incurred accordance with terms of approved PPAs. This is in line with Regulation 8.1 (d) of MYT Regulations, 2019 as reproduced below

Quote

8.1(d) Variation in the approved cost of power purchase from approved sources, subject to clauses in the power purchase agreement or arrangement approved by the Commission

Unquote

4.5.52 In line with the directions of Commission in the Tariff Order dated August 26, 2021 the Petitioner has purchased 73.93 MU non-solar renewable power at Rs. 5.45 per kWh landed at NPCL Periphery from Green Term Ahead Market (GTAM) of Power Exchanges for meeting its RPO.

4.5.53 The Petitioner submitted that M/s Tata Solar and M/s Adani Solar with whom the Petitioner is having long term PPA for purchase of solar power have filed petitions for additional claim as follows:

i. Petition No. 1665/2021 claiming imposition of Safeguard Duty as Change in Law
ii. Petition No. 1711/2021 claiming extension in Commercial Operation Date
iii. Petition No. 1741/2021 claiming imposition of Safeguard Duty as Change in Law
iv. Petition No. 1753/2021 claiming additional amount prior to the scheduling of power

4.5.54 Accordingly, any amount claimed by M/s Tata Solar and M/s Adani Solar subsequent to disposal of above petitions by the Commission would be included in our subsequent ARR petitions.

4.5.55 During FY 2021-22, overall procured 227.83 MU renewable power as summarized in Table below:

***TABLE 4-41: RENEWABLE POWER* FOR FY 2021-22**

Description	Actual		
	Units	Rate/ kWh	Amount
Solar Power (GNIDA)	1.22	6.92	0.84
Solar Power (APPCPL)	0.41	5.13	0.21
Solar Power (Adani)	51.81	3.24	16.81
Solar Power (Tata)	4.64	3.24	1.50
Solar Power (Net Metering)	9.13	7.85	7.16
Wind Power (PTC)	32.04	3.82	12.24
APPCPL- (Source- DoP, GoAP)	6.44	4.97	3.20
APPCPL- (Source- DoP, Nagaland)	6.24	4.84	3.02
APPCPL- (Source- MePDCL, Meghalaya)	26.74	4.84	12.95

Description	Actual		
	Units	Rate/ kWh	Amount
KREATE- (Source- E&PD, Govt of Sikkim)	15.23	4.85	7.39
Subtotal	**153.90**	**4.24**	**65.32**
Power Exchange	73.93	5.45	40.33
Total	**227.83**	**4.64**	**105.65**

4.5.56 The Petitioner further, based on above referred procurement of renewable power, the status of RPO computed in accordance with RPO Regulations as at end of FY 2021-22 is as provided in Table below:

***TABLE 4-42: RPO STATUS* FOR FY 2021-22**

RE Power	Opening Unfulfilled Obligation	Obligation for the year	Obligation met during the year*	Balance Obligation Carried Forward
	A	B	c	d=a+b-c
Solar	44.62	75.14	96.28	23.48
Non-Solar	140.52	112.71	160.63	92.60
Hydro Power	(12.71)	56.36	-	43.65
Total#	**172.42**	**244.21**	**256.90**	**159.73**
** including gross generation under net-metering arrangements* *# Total may not tally due to rounding offs*				

4.5.57 The Petitioner submitted that the Commission in the Tariff Order dated July 20, 2022, while Truing up the ARR for FY 2020-21, has revised the methodology of computing RPO by considering the ex-bus energy purchased by the Company. The relevant extract of the order is provided below:

Quote

4.5.100 Till, FY 2019-20, the Commission had been computing the RPO compliance considering the sales. The Commission is of the view that RPO compliance has to be computed on total consumption of energy at ex-bus and not on sales as done till FY 2019-20. Therefore, from FY 2020-21 onwards, the Commission deems it fit to revise methodology of computing RPO by considering the ex-bus energy purchased by NPCL. As the true-ups for the previous years' upto FY 2019-20 had already been carried out, the RPO compliance computed by the Commission for the period upto FY 2019-20 shall not be revised on account of the change in methodology.

Unquote

4.5.58 Thus, in aforesaid order, the Commission has changed the methodology of RPO computation from "consumption units" to "power purchase units" at ex-bus contrary to UPERC (Promotion of Green Energy through Renewable Purchase Obligation) Regulations, 2010 as amended from time to time. On this aspect, the Company has filed an Aappeal No.398 of 2022, and therefore, for the purpose of computation of RPO, the Company has not considered the methodology as adopted by the Commission in Tariff Order dated July 20, 2022 and computed the above shown RPO Status on the basis of methodology as followed by the Commission in its preceding Tariff Orders.

UI/ DSM Power

4.5.59 The Petitioner further, humbly submitted that it is highly uncertain or in-fact not feasible to exactly estimate the day-ahead power requirement as the demand is highly volatile, uncertain and dependent on a number of factors which are beyond the control of the Company e.g. volatile weather conditions, long intermittent holidays on account of various festivals, Govt. holidays etc. There can be certain time-blocks wherein the power tied-up may remain unutilised and thus, need to be settled in accordance with the DSM Regulations as per the rates prevailing in the power exchange during that particular time-block and respective frequency. Thus, the Petitioner has incurred Rs. 28.11 Crore towards 41.21 MU power settled under DSM Regulations which is approximately 1.5% of the power purchase quantum and 2% of power purchase cost.

4.5.60 The Commission may kindly appreciate that the MYT Regulations also provides for power drawl under DSM mechanism. Regulation 14.7 of the MYT Regulations, 2019 states as follows:

Quote

14.7 In the regime of Availability Based Tariff (ABT), the cost of power purchase through Deviation Settlement Mechanism (DSM) shall be allowed to be passed through in Tariff of the subsequent year subject to the following condition:

(a) The Average rate for power purchased through DSM should not exceed the maximum rate for power purchased under the Merit order of the licensee as approved by the Commission.

(b) The total cost of Electricity units purchased through DSM shall be restricted to 10% of total power purchase cost approved by the Commission

Unquote

4.5.61 From the above, it is kindly evident that the power procurement cost from DSM is well within the overall limit of 10% of power purchase cost and is just 2 % of overall power purchase cost.

4.5.62 The Commission vide its Tariff Order dated June 29, 2021 trued up the ARR of UPPTCL for FY 2019-20. Based on the said order, UPPTCL raised invoices for aggregate amount of Rs. 12.82 Crore which has been paid and considered by the Company in its ARR for True-up of FY 2021-22.

4.5.63 The Petitioner submitted that based on the Accounting Statement for FY 2021-22 and aforesaid submissions with respect to Impact of Genco's True-up Order dated 22.11.2022, the summary of Power Purchase Cost for FY 2021-22 as claimed in True-up ARR for FY 2021-22 vis-à-vis provisionally approved by the Commission vide Tariff Order dated August 26, 2021, is given in table below for kind perusal and approval of the Commission:

***TABLE 4-43: TOTAL POWER PURCHASE COST* FOR FY 2021-22**

Sl. No.	Item	Approved			Actual		
1	**Source of Power Purchase**	**MU's**	**Rs. / kWh**	**Amount Rs. Crore**	**MU's**	**Rs. / kWh**	**Amount Rs. Crore**
2	Long Term –Genco	1182.74	4.77	564.12	1157.35	6.14	710.15
3	Change in Law	-	-	-	-	-	5.12
4	Additional Coal – Genco	-	-	-	-	-	(7.03)
5	Genco True-up Arrear	-	-	-	-	-	155.07
6	Medium Term	580.57	5.07	294.26	434.78	4.59	199.46
7	Short Term (DEEP)	-	-	-	119.58	6.55	78.33
8	Power Exchange	454.05	4.08	185.12	559.30	6.22	347.65
9	RE Power	146.31	4.11	60.14	153.90	4.24	65.32
10	RE Power Exchange	319.15	4.43	141.32	73.93	5.45	40.33
11	UI/DSM	-	-	-	41.21	6.82	28.11
12	UPPTCL True-up Arrear (FY 2017-18 & FY 2018-19) as per UPPTCL Tariff order dt. 10.11.2020	-	-	-	-	-	12.82
Total Power Purchase Cost		**2,682.83**	**4.64**	**1,244.96**	**2540.05**	**6.44**	**1635.32**
**Total may not tally due to rounding offs*							

4.5.64 Accordingly, the total Power Purchase Cost considered for True-up is Rs. 1,635.32 Crore which includes Inter-State and Intra-State Transmission charges of Rs. 150.26 Crore for FY 2021-22 based on the Audited Accounts.

Commission's Analysis

4.5.65 Based on the True-Up of Energy Balance for FY 2021-22, the power purchase requirement for NPCL at Discom Periphery has been worked out. The reconciliation of the total power purchase cost claimed by the Petitioner for True-Up of ARR for FY 2021-22 with the Audited Accounts is shown in the table below:

TABLE 4-44: RECONCILATION OF POWER PURCHASE COST FOR FY 2021-22

Sl. No.	Particulars	Ref.	Amount
1	**True Up Tariff Petition**	**A**	**1,635.32**
2	Arrear against bills raised by Genco before T.O. dt. 22.11.2021 included in Audited Accounts of FY 2018-19 but not approved by the Hon'ble Commission in True-up Order dated 04.12.2020	B	(98.86)
3	Carrying Cost on above	C	(30.96)
4	Interest paid to Genco on part of the arrear paid in Nov-21	D	19.57
5	**Audited Accounts (NPCL)**	**e=a+b+c+d**	**1,525.07**

4.5.66 The Commission also observed that the total transmission charges claimed by the Petitioner for True-Up of ARR for FY 2021-22 are not matching with the total transmission charges given in the Note-29 of the Audited Accounts for FY 2021-22. Accordingly, the Commission has sought the justification of the same from the Petitioner. In response the Petitioner has submitted as under:

TABLE 4-45: RECONCILATION OF POWER PURCHASE COST FOR FY 2021-22

Particulars	Ref.	As per Audited Financial Statement	As per Audited Cost Records	Variance
Energy Charges	A	1,384.56	1,374.80	9.76
Transmission charges	B	140.50	150.26	(9.76)
Subtotal	**c=a+b**	**1,525.06**	**1,525.06**	**-**

4.5.67 Further, the Commission directed the Petitioner to submit the auditor's certificate to depict the total power purchase from each source at Ex-Bus and NPCL periphery for FY 2021-22. The Petitioner submitted that the compliance to the same has been furnished as part of the Cost Audit Report (duly certified by the Chartered Accountant) as Annexure 2(b) along with the ARR Petition.

4.5.68 The Commission also directed the Petitioner to furnish the copies of all the PPAs and the approval accorded by the Commission through its Orders for each generating sources claimed in the True-Up of ARR for FY 2021-22. The Petitioner has accordingly submitted the information for all sources approved by the

Commission. However, some of the sources claimed by the Petitioner are not approved by the Commission. Hence, taking the same into consideration appropriate treatment for the power purchase from these sources has been done. The Commission has accordingly analyzed and approved the power purchase cost individually for each source and the left-over energy after fulfilling the power purchase requirement has been dealt separately.

Power Procurement from Long Term Sources

4.5.69 The power purchase cost claimed by the Petitioner from the Dhariwal Infrastructure limited (DIL) for FY 2021-22 is shown in the Table below:

TABLE 4-46-POWER PURCHASE FROM LONG TERM SOURCE (DIL) SUBMITTED BY THE PETITIONER FOR FY 2021-22 (Rs. Crore)

Particulars	MU at Ex-Bus	Inter State Loss (%)	MU at UP State Bus	Intra State Loss (%)	MU at NPCL Bus	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Amount (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL charges (Rs. Crore)	Total Transmission (Rs. Crore)	Total (Rs. Crore)	Total (Rs. /kWh)
Dhariwal Infrastructure limited (DIL)	1,240.06	3.45%	1,197.22	3.33%	1,157.35	233.16	379.16	612.31	69.85	27.98	97.83	710.15	6.14
Additional Coal (FY 2021-22)						-	(7.03)	(7.03)	-	-	-	-7.03	
Change in Law (FY 2021-22)						-	5.12	5.12	-	-	-	5.12	
Arrears wrt DIL True-up Order for FY17 to FY19 dated 22.11.2021 (incl. carrying cost)						-	155.07	155.07	-	-	-	155.07	
Subtotal	**1,240.06**	**3.45%**	**1,197.22**	**3.33%**	**1,157.35**	**233.16**	**532.32**	**765.47**	**69.85**	**27.98**	**97.83**	**863.31**	**7.46**

4.5.70 The Petitioner has claimed the actual plant availability of DIL for FY 2021-22 as 86.78% and booked full fixed cost @ 85% in the Audited Accounting for FY 2021-22. In this regard, the Commission is of view that power purchase from DIL for FY 2021-22 shall be calculated based on the actual energy availability of DIL for FY 2021-22 and approved fixed Charges and energy charges of DIL for FY 2021-22 determined in the Order dated September 21, 2021 in Petition No 1531 of 2019. The Commission has adopted similar approach to calculate the power purchase cost of Petitioner from DIL in Tariff Order of previous years, which is sub-judice presently before the Hon'ble APTEL under the Appeal No. 98 of 2021 and 343 of 2021. Thus, any change in the same will be subjected to the finality of the aforesaid Appeals.

4.5.71 The Tariff (Fixed and Energy Charges) of DIL for FY 2021-22 approved in the Order dated September 21, 2021 in Petition No 1531 of 2019 is reproduced as under:

Quote

2.5.1 The ARR and Generation Tariff for the tariff period FY 2019-20 to FY 2023-24 for supply of power from Unit 2 of DIL (187 MW) to NPCL as approved by the Commission is as shown in the table below:

TABLE 23: ARR and Generation Tariff for FY 2019-20 to 2023-24 approved by the Commission (Excluding the cost of Additional Coal and Change in Law events)

Particulars	*UoM*	*FY 2019-20*	*FY 2020-21*	*FY 2021-22*	*FY 2022-23*	*FY 2023-24*
Operationalized Contracted Capacity (Gross)	*MW*	*187*	*187*	*187*	*187*	*187*
Normative Auxiliary Power Consumption	*%*	*8.50%*	*8.50%*	*8.50%*	*8.50%*	*8.50%*
Normative Annual Plant Availability Factor (NAPAF)	*%*	*85.00%*	*85.00%*	*85.00%*	*85.00%*	*85.00%*
Operationalized Contracted Capacity (Net)	*MW*	*171*	*171*	*171*	*171*	*171*
Ex -bus Generation	*Mus*	*1277.54*	*1274.05*	*1274.05*	*1274.05*	*1277.54*
Annual Fixed Charges for Operationalized Contracted Capacity for NPCL	*₹ Crores*	*241.60*	*236.23*	*230.95*	*225.72*	*220.58*
Ex-bus Fixed Charge Rate at NAPAF	***₹ / kWh***	***1.891***	***1.854***	***1.813***	***1.772***	***1.727***
Ex-bus Energy Charge rate at Scheduled Generation*	***₹ / kWh***	***2.471***	***2.471***	***2.471***	***2.471***	***2.471***
Total Ex-Bus Energy Charges	*₹ / kWh*	*315.68*	*314.82*	*314.82*	*314.82*	*315.68*
Application Fees & Statutory Charges	*₹ Crores*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Total Annual Revenue Requirement for FY 2019-24 for supply to NPCL	***₹ Crores***	***557.27***	***551.05***	***545.77***	***540.54***	***536.26***
Ex-bus Generation Tariff for FY 2019-24 for supply to NPCL	***₹ / kWh***	***4.362***	***4.325***	***4.284***	***4.243***	***4.198***

Quote

4.5.72 Therefore, the Commission has not considered the per unit rate of Fixed & Energy Charges of DIL submitted by the Petitioner to calculated the power purchase cost from DIL for FY 2021-22. The impact of True Up of DIL for FY 2021-22 shall be allowed to the Petitioner in Tariff Order of appropriate year, as the case may be.

4.5.73 Further, the Commission observed that the Petitioner had claimed supplementary / additional bills of CTU / PGCIL charges of DIL for the period April to June, July to September, October to December & January to March in FY 2020-21. The Commission sought justification from the Petitioner vide Deficiency Note Letter dated January 06, 2023. In reply, the Petitioner submitted that these bills correspond to the Second PoC Bill issued by CTUIL for transmission charges from time to time, as per the methodology mentioned in the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses), Regulations, 2020. The Petitioner further submitted that the Second POC Bills are raised on account of revision in transmission charges allowed to CTUIL in the aforesaid Regulation. Also, the Petitioner confirms that the aforesaid bills / expenses are not claimed in the previous Tariff Petitions.

4.5.74 The Commission has considered lower of the two values viz. claimed vs computed for each of the components of tariff for approval of power purchase cost from DIL for FY 2021-22 and the power purchase cost calculated for Petitioner from DIL for FY 2021-22 is shown in the Table below:

TABLE 4-47-POWER PURCHASE FROM LONG TERM SOURCE (DIL) COMPUTED BY THE COMMISSION FOR FY 2021-22 (Rs. Crore)

Particulars	MU at Ex-Bus	Inter State Loss (%)	MU at UP State Bus	Intra State Loss (%)	MU at NPCL Bus	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Amount (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL charges (Rs. Crore)	Total Transmission (Rs. Crore)	Total (Rs. Crore)	Total (Rs. /kWh)
Dhariwal Infrastructure limited (DIL)	1,240.06	3.45%	1,197.22	3.33%	1,157.35	224.82	306.42	531.24	69.85	27.98	97.83	629.08	5.44

4.5.75 The Petitioner claimed the additional Coal Cost for FY 2021-22, Change in Law for FY 2021-22 and Impact of DIL True-Up for Tariff Period FY 2016-17 to FY 2018-19 (Order dated November 22, 2021 in Petition No 1500/2019) in power purchase cost from DIL for FY 2021-22. The Commission vide Deficiency Note Letter dated January 06, 2023 sought the copy of relevant Orders & bills, payment vouchers, details of prompt payment rebates and penalties, if any, from the Petitioner. In reply, the Petitioner submitted the details for claim of additional coal cost for FY 2021-22 and

Change in Law for FY 2021-22 as shown in the Table below:

TABLE 4-48: SUMMARY OF CHARGES FOR ADDITIONAL COAL AND CHANGE IN LAW SUBMITTED BY THE PETITIONER FOR 2021-22 (Rs. Crore)

Invoice Date	Invoice No.	Particulars	Order	Ref.	Amount
29-04-2022	NPCL/SI/2022-23/02	Charges for Additional Coal for FY 2021-22	Order dated 6th May'20 in Petition 1438/2019	a	(7.03)
29-04-2022	NPCL/SI/2022-23/02	Charges for Change in Law for FY 2021-22	Order dated 29th May'20 in Petition 1440/2019	b	5.22
		Less: Rebate		c	(0.10)
		Net Charges for Change in Law for FY 2021-22		d=b-c	5.12
Net Amount Adjusted with Energy Bill for the Month of Apr'22				**e=a+d**	**(1.91)**

4.5.76 The Petitioner also submitted the impact of DIL True Up Order dated November, 22, 2021, as shown in the Table below: -

Quote

TABLE 4-49: DETAILS OF CLAIMS AGAINST IMPACT OF DIL'S TRUING UP ORDER DATED 22.11.2021 (Rs. Crore)

Particulars	*Ref.*	*FY 2016-17*	*FY 2017-18*	*FY 2018-19*	*Total*
		Rs. Crore	*Rs. Crore*	*Rs. Crore*	*Rs. Crore*
A. Summary of Amount Billed by DIL , Claimed by NPCL and Approved by UPERC					
Cost of Power for FY 2016-17 billed by DIL in FY 2016-17	*A*	*37.91*			***37.91***
Cost of Power for FY 2017-18 billed by DIL in FY 2017-18	*B*		*457.83*		***457.83***
Cost of Power for FY 2018-19 billed by DIL in FY 2018-19	*C*			*497.55*	***497.55***
Arrear for FY 2016-17 billed by DIL pursuant to Order dt. 05-Feb-19 in FY 2018-19	*D*			*0.46*	***0.46***
Arrear for FY 2017-18 billed by DIL pursuant to Order dt. 05-Feb-19 in FY 2018-19	*E*			*28.54*	***28.54***
Total Cost of Power Billed by DIL	***f=a+..+e***	***37.91***	***457.83***	***526.55***	***1,022.29***
Less: Rebate availed on prompt payment @ 2%	*G*	*0.80*	*10.46*	*10.95*	***22.21***
Net Amount Claimed by NPCL in its Truing-up Petitions	***h=f-g***	***37.11***	***447.36***	***515.61***	***1,000.08***
Amount Approved in Tariff Orders	*I*	*37.11*	*447.36*	*416.74*	*901.22*
Amount Approved in DIL's Truing-up Order	***j***	***37.95***	***486.64***	***499.07***	***1,023.66***
B. Summary of Amounts claimed in NPCL's True-up for FY 2021-22					

Particulars	Ref.	FY 2016-17	FY 2017-18	FY 2018-19	Total
		Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Amount Approved by Hon'ble UPERC in DIL's Truing-up Petition in addition to Amount billed by DIL	*k=j-f*				***1.37***
Differential Amount as per DIL's True-up Order dt. 22.11.21 earlier deferred in NPCL's Truing up orders (net of rebate)	***l=h-i***				***98.86***
Incremental O&M Exp. as approved in TO. dt. 22.11.21	*m*				***2.72***
Carrying Cost on Additional Coal Charges for FY 18 and FY-19 as approved in TO. dt. 22.11.21	*n*				***13.62***
Carrying Cost on Change in Law Charges for FY 17 to FY-19 as approved in TO. dt. 22.11.21	*o*				***9.01***
Carrying Cost on Amount Approved by Hon'ble UPERC in DIL's Truing-up Petition in addition to Amount billed by DIL	*p*				***0.45***
Carrying Cost for FY 2018-19 on Differential Amount Trued-up vide DIL's True-up Order dt. 22.11.21 earlier deferred in NPCL's Truing up orders	*q=l*14.57 %*6/12*			*7.20*	
Carrying Cost for FY 2019-20 on Differential Amount Trued-up vide DIL's True-up Order dt. 22.11.21 earlier deferred in NPCL's Truing up orders	*r=l*14.46 %*			*14.29*	
Carrying Cost for FY 2020-21 on Differential Amount Trued-up vide DIL's True-up Order dt. 22.11.21 earlier deferred in NPCL's Truing up orders	*s=l*9.57%*			*9.46*	
Total Carrying Cost	***t=q+r+s***				***30.96***
Subtotal	***u=k+l+m+ n+o+p+t***				***156.99***
Less: Rebate on above	*V*				*-1.92*
Net Arrear for approval	***w=u-v***				***155.07***

Unquote

4.5.77 The Commission with regard to the impact of additional coal cost and change in law claimed by the Petitioner for FY 2019-20 & FY 2020-21, in True Up of ARR for FY 2020-21 in Tariff Order dated July 20, 2022 did not allow the same to the Petitioner. The relevant extract of the Order is reproduced below:

Quote

Therefore, taking into consideration the view taken in the True-up of FY 2019-20, the claim of Petitioner towards change in law and additional coal shall be allowed when the Commission does the True-up of DIL for the FY 2019-20 and FY 2020-21.

Accordingly, the change in law and additional coal cost claimed for FY 2019-20 and FY 2020-21 is not approved and NPCL can approach the Commission when the same is approved for DIL for FY 2019-20 and FY 2020-21.

Unquote

4.5.78 Thus, taking the above into consideration, the impact of change in law and additional coal for FY 2021-22 claimed by the Petitioner shall be only allowed once the True-up of DIL for Tariff Period FY 2019-20 to FY 2023-24 is issued by the Commission. Accordingly, the same is not approved in True-Up of power purchase cost for FY 2021-22. However, the Petitioner may approach to the Commission for the same, in the appropriate year, whenever the Order for the True Up of ARR of DIL for Tariff Period FY 2019-20 to FY 2023-24 will be issued.

4.5.79 Further, with regard to the Petitioner claim related to the impact of DIL True Up Order for Tariff Period from FY 2016-17 to FY 2018-19, the Commission vide Order dated November 22, 2021 in Petition No 1500/2019 in the matter related to the True Up of ARR of DIL for FY 2016-17 to FY 2018-19 given the certain observations which are reproduced below:

Quote

2.6 Recovery of Revenue Gap for the Tariff Period FY 2016-19

2.6.2 The Trued up ARR for FY 2016-19 has been worked out to Rs 1023.66 Crs against the approved ARR of Rs. 1022.56 Crs in terms of MYT order dated 05.02.2019. Accordingly, the Commission directs NPCL to make payment to DIL of the Revenue Gap amount of Rs.1.1 Crores in six equal monthly instalments starting from the date of issuance of this order, along with applicable Carrying Cost (simple interest) till the date of this order in compliance with Regulations 6 (9) of Generation Tariff Regulations 2014.

Regarding the carrying cost claimed by DIL, on the difference with respect to payment made by NPCL, it is clarified that difference between billing by DIL based on MYT order dated 05.02.2019 and payments released by NPCL in respect of those bills falling due for payment is covered by the Regulations 30 of the UPERC Regulations, 2014.

3.0 Summary of Decision (s) of the Commission

.....

(e) ***Incremental O&M expenses:*** *The following expenses are disallowed as O&M expenses to form part of IWC, but to be recovered from NPCL as reimbursement.*

Incremental O&M Expenses during FY 2016-19 - Unit 2				
Particulars	***UoM***	***FY 2016-17***	***FY 2017-18***	***FY 2018-19***
Payment to Pollution Control Board for supply to NPCL	*₹ Crores*	*0.04*	*0.00*	*0.49*
Water Charges for supply to NPCL	*₹ Crores*	*0.13*	*0.94*	*1.01*
Regulatory Fees (Petition filing fees)	*₹ Crores*	*-*	*0.10*	*0.01*
Additional O&M Expenses for supply to NPCL	***₹ Crores***	***0.17***	***1.04***	***1.51***

....

(g) Approved and Trued-up ARR (Rs. /Crs)

	FY 2016-17	***FY 2017-18***	***FY 2018-19***	***TOTAL***
Approved ARR	*37.93*	*486.39*	*498.24*	*1022.56*
Trued up ARR	*37.95*	*486.64*	*499.07*	*1023.66*
Difference	***0.02***	***0.25***	***0.83***	***1.1***

(h) Approved carrying cost on claims due to Procurement and use of ***Additional coal for FY 2017-18 & FY 2018-19 = Rs.13.62 Crs.***

(i) *Approved carrying cost on claims under* ***change in law events for FY 2016-17 to FY 2018-19 = Rs. 9.01 Crs.***

Unquote

4.5.80 The DIL was allowed to recover the carrying cost from the Petitioner on the un-recovered Trued-Up tariff amount determined by the Commission in the DIL True-Up Order dated November 22, 2021 for Tariff Period FY 2014-15 to FY 2018-19. Therefore, as per the provisions stipulated in the Regulation 6(9) of MYT Generation Tariff Regulations 2014, the carrying cost on the under recovered DIL Trued Up tariff amount for Tariff Period FY 2016-17 to FY 2018-19 is calculated for the Petitioner. The relevant extract of the aforesaid regulation is reproduced below: -

Quote

6. Truing up of Capital Expenditure and Tariff :

(9) Where after the truing up the tariff recovered is less than the tariff approved by the Commission under these regulations the generating company shall recover from the beneficiaries, the under-recovered amount along with simple interest at the rate equal to the Bank Rate, prevailing as on 1st April of the respective Year.

16. Definitions:

(7) 'Bank Rate' means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;

Unquote

4.5.81 Thus, in the light of above provisions and given directions in the True Up Order of DIL for dated November 22, 2021 for Tariff Period FY 2014-15 to FY 2018-19, the carrying cost on the under recovered True-Up amount of DIL is shown in the Table below:

Table 4-50: CARRYING COST ON THE UNDER RECOVERY OF THE TRUE UP TARIFF AMOUNT APPROVED FOR DIL

Particulars	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**Total**
Approved in ARR	37.93	486.39	498.24	1,022.56
Approved in True Up	37.95	486.64	499.07	1,023.66
Under Recovery of the True-Up Tariff Amount	**0.02**	**0.25**	**0.83**	**1.10**
Calculation of the Carrying Cost				
FY 2016-17 (@ 12.8%) (Half Year on under recovered amount for FY 2016-17)	0.001	-	-	0.00
FY 2017-18 (12.6%) (Half Year on under recovered amount for FY 2017-18)	0.003	0.016	-	0.02
FY 2018-19 (12.2%) (Half Year on under recovered amount for FY 2018-19)	0.002	0.031	0.051	0.08
FY 2019-20 (12.55%)	0.003	0.031	0.104	0.14
FY 2020-21 (11.65%)	0.002	0.029	0.097	0.13
FY 2021-22 (10.95%) (235 Days on under recovered amount of all years)	0.001	0.018	0.059	0.08
Total Carrying Cost	**0.012**	**0.124**	**0.310**	**0.45**

Source: https://sbi.co.in/web/interest-rates/interest-rates/base-rate-historical-data

4.5.82 Further, the Commission in the True Up of ARR of Petitioner for FY 2016-17, FY 2017-18 & FY 2018-19 respectively in the Tariff Order dated January 22, 2019, September 03, 2019 & December 04, 2020, allowed the power purchase cost to Petitioner from DIL against its claim as under:

Table 4-51: APPROVED POWER PURCHASE COST FROM DIL IN TARIFF ORDER OF PREVIOUS YEARS

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	Total
Amount Claimed by NPCL in Truing-up Petitions	37.11	447.36	515.61	1,000.08
Amount Approved in True Up of Tariff Orders	**37.11**	**447.36**	**416.74**	**901.22**
Difference	**-**	**-**	**98.86**	**98.86**

4.5.83 Also, the Commission in the Tariff Order for FY 2022-23 dated July 22, 2022 has ruled as under:

Quote

From the submissions of the Petitioner, it has been observed that the Petitioner has claimed carrying cost on additional power purchase on account of true-up Order of the Commission dated November 22, 2021. The Commission for the purpose of this Order has considered the absolute amounts allowed for DIL as per the Commission's Order dated November 22, 2021. The issue of carrying cost shall be dealt with in the True-up of FY 2021-22 and FY 2022-23. NPCL is directed to make detailed submissions in this regard in its True-up Petitions for FY 2021-22 and FY 2022-23.

Unquote

4.5.84 Therefore, considering the rate of interest allowed to the Petitioner for carrying cost on the Revenue Gap/(Surplus) of True-Up of ARR for FY 2018-19, FY 2020-21 & FY 2021-22 in respective Tariff Order dated December 04, 2020, August 26, 2021 & July 20, 2022, the carrying cost on differential power purchase cost from the DIL i.e. claimed by NPCL in True Up Petition vis-à-vis approved by the Commission is shown in the Table below:

Table 4-52: Carrying Cost for the Differential Power Purchase Cost from DIL

Calculation of the Carrying Cost	Rate of Interest Carrying Cost	Amount
Differential Power Purchase Cost from DIL (NPCL True-Up Order vis-à-vis NPCL Claim in True-Up for FY 2016-17, FY 2017-18 & FY 2018-19)		98.86

Calculation of the Carrying Cost	Rate of Interest Carrying Cost	Amount
Carrying Cost for FY 2018-19 (allowed for Half Year)	14.57%	7.20
Carrying Cost for FY 2019-20 (allowed for Full year)	14.46%	14.29
Carrying Cost for FY 2020-21 (allowed for 236 days i.e. till issuance of the DIL True-Up Order dated November 22, 2021)	9.57%	9.46
Total Carrying Cost		**30.96**

4.5.85 The Petitioner submitted that it has already paid the DIL billed amount (net of the rebate) as claimed in the True-Up of ARR for respective years (i.e. FY 2016-17 to FY 2018-19). The balance amount to be paid by the Petitioner to DIL over and above of the DIL Trued-Up tariff amount of DIL determined in Order dated November 22, 2021 is shown in the Table below:

Table 4-53: AMOUNT TO BE PAID TO DIL OVER AND ABOVE OF TRUED AMOUNT OF TARIFF PERIOD FOR FY 2016-17 to FY 2018-19

Particulars	Ref.	FY 2016-17	FY 2017-18	FY 2018-19	Total
		Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs. Cr.
Power purchase Cost as billed by DIL	A	37.91	457.83	497.55	993.29
Arrear for FY 2016-17 billed by DIL pursuant to Order dt. 05-Feb-19 in FY 2018-19	B			0.46	0.46
Arrear for FY 2017-18 billed by DIL pursuant to Order dt. 05-Feb-19 in FY 2018-19	C			28.54	28.54
Total Cost of Power Billed by DIL	**D=(A+B+C)**	**37.91**	**457.83**	**526.55**	**1,022.29**
Less: Rebate availed on prompt payment @ 2%	E	0.80	10.46	10.95	22.21
Power Purchase Cost from DIL claimed by NPCL in its Truing-up Petitions	F=D-E	37.11	447.36	515.61	1,000.08
True Up of ARR of DIL for Tariff Period FY 20216 to FY 2018-19 as per Order dated November 22, 2021	**G**	**37.95**	**486.64**	**499.07**	**1,023.66**
Differential amount (DIL Trued Up amount vis-à-vis Billed by DIL to Petitioner)	H=(G-D)	0.04	28.81	-27.49	1.37
Less: Unrecovered Trued Up Tariff Amount of DIL for FY 20216-17 to FY 2018-19	I	0.02	0.25	0.83	1.10
Amount to be Paid to DIL over and above of the DIL Trued Up amount	**J=(H-I)**				**0.27**

4.5.86 Hence, keeping the above in view, the Commission find the Petitioner's claim satisfactory for the impact of the DIL True Up Order dated November 22, 2021 for Tariff Period FY 2016-17 to FY 2018-19.

4.5.87 The Commission approved the power purchase cost of the Petitioner from the

Long-Term source DIL (including Transmission Charges and Impact of DIL's True Up Order) for FY 2021-22 as shown in the Table below:

TABLE 4-54-POWER PURCHASE FROM LONG TERM SOURCE (DIL) APPROVED BY THE COMMISSION FOR 2021-22 (Rs. Crore)

Source	MU at Ex-Bus	Inter State Loss (%)	Intra State Loss (%)	MU at NPCL Bus	Fixed Charges (Rs. Cr.)	Energy Charges (Rs. Cr.)	Amount (Rs. Cr.)	PGCIL Charges (Rs. Cr.)	UPPTCL charges (Rs. Cr.)	Total Transmission (Rs. Cr.)	Total (Rs. Cr.)	Total (Rs. /kWh)
DIL	1,240.06	3.45%	3.33%	1,157.35	224.82	306.42	531.24	69.85	27.98	97.83	629.08	5.44
Additional Coal Charges FY 2021-22 (A)	Change in Law and Additional Coal shall be allowed when the Commission does the True-up of DIL for the FY 2021-22											
For Change in Law (FY 2021-22) (B)												
Arrears claimed (for FY 2016-17 to FY 2018-19) (C)						155.07					155.07	
Total Arrears (DIL) (A+B+C)	**1,240.06**	**3.45%**	**3.33%**	**1,157.35**	**224.82**	**461.49**	**686.31**	**69.85**	**27.98**	**97.83**	**784.14**	**6.78**

Medium Term Power Purchase

4.5.88 The Medium-Term Power Purchase along with Transmission charges) claimed by Petitioner for FY 2021-22 is shown in the Table below:

***TABLE 4-55:MEDIUM TERM POWER PURCHASE COST* FOR FY 2021-22**

Sources	Units at NPCL (MU)	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Total Transmission Charges (Rs. Crore)	Total Cost at NPCL Bus (Rs. Crore)	Landed Rate at NPCL Bus (Rs./kWh)
APPCPL- Govt. of AP	192.56	41.29	46.11	10.10	97.50	**5.06**
APPCPL- Govt. of Nagaland	99.45	21.68	23.84	2.67	48.20	**4.85**
APPCPL- GEL, HP	33.22	5.56	6.40	0.91	12.87	**3.87**
TPTCL- Govt of HP	109.55	17.24	20.76	2.90	40.90	**3.73**
Total	**434.78**	**85.78**	**97.11**	**16.57**	**199.46**	**4.59**

4.5.89 The Commission vide Order dated February 28, 2020 in Petition No. 1552 of 2020 approved the tariff of power purchase for NPCL from the sources such as M/s APPCPL (Source: Department of Power & Source: Govt. of Arunachal Pradesh) and M/s APPCPL (Source: Department of Power & Source: Govt. of Nagaland). The relevant extract of the aforesaid Order is reproduced below:

Quote

Source	*-*	*Department of Power, Govt. of Arunachal Pradesh*	*Department of Power, Govt. of Nagaland*
Quantum at NPCL Bus		*a) April-September: 50 MW during 00:00-24:00 Hrs., b) October-November: 25MW during 18:00-22:00 Hrs. and c)December -March: 25 MW during 18:00-20:00 Hrs.*	*a) April-September: 50 MW during 00:00-24:00 Hrs., b) October-November: 25MW during 18:00-22:00 Hrs. and c)December -March: 25 MW during 18:00-20:00 Hrs.*
Cost of Generation (Rs./kWh)	*A*	*2.090*	*2.085*
Cost of Transmission Charges (Rs./kWh)	*B*	*1.000*	*0.990*
Cost of Transmission losses (Rs./kWh)	*C*	*0.280*	*0.300*
Total Tariff at NPCL Bus(Rs./kWh)	*D=(A*2)+B+C*	*5.460*	*5.460*

Therefore, the Commission in view of the submissions made by the Petitioner during the hearing and further during the presentation held at Commission's office on 24.02.2020, adopts the power procurement as per the Table 4 above and approves the PPAs dated 23.01.2020 between the Petitioner and M/s APPCPL for (a) Source: Department of Power, Govt. of Arunachal Pradesh and (b) Department of Power, Govt. of Nagaland.

The Petition is disposed of in terms of above.

Unquote

4.5.90 The Commission considered the above approved tariff to determine the power purchase cost for NPCL from the sources such as M/s APPCPL (Source: Department of Power & Govt. of Arunachal Pradesh) and M/s APPCPL (Source: Department of Power, Govt. of Nagaland in True Up of ARR for FY 2021-22.

4.5.91 Similarly, the Commission vide Order dated May 10, 2021 in Petition No. 1671 of 2021 approved the tariff of power purchase for NPCL from the sources such as M/s APPCPL (Source: Goodwill Energy, HP) and M/s TPTCL (Source: Department of Power, Govt. of Himachal Pradesh). The relevant extract of the aforesaid Order is reproduced below:

Quote

Source	_	*Goodwill Energy, H.P.*
Quantum at NPCL Bus		*a) May'21-September'21: 15 MW during 00:00-24:00 Hrs.,* *b) May'22-September'22: 15 MW during 00:00-24:00 Hrs. and* *c) May'23-September'23: 15 MW during 00:00-24:00 Hrs.*
Cost of Generation (Rs./kWh)	*A*	*1.695*
Cost of Transmission Charges (Rs./kWh)	*B*	*0.790*
Cost of Transmission losses (Rs./kWh)	*C*	*0.250*
Total Tariff at NPCL Bus(Rs./kWh)	*D=(A*2) +B+C*	*4.43*

Source	_	*Govt. of Himachal Pradesh*
Quantum at NPCL Bus		*a) May'21-September'21: 45 MW during 00:00-24:00 Hrs.,* *b) May'22-September'22: 45 MW during 00:00-24:00 Hrs. and* *c) May'23-September'23: 45 MW during 00:00-24:00 Hrs.*
Cost of Generation (Rs./kWh)	*A*	*1.6660*
Cost of Transmission Charges (Rs./kWh)	*B*	*0.7978*
Cost of Transmission losses (Rs./kWh)	*C*	*0.3000*
Total Tariff at NPCL Bus(Rs./kWh)	*D=(A*2) +B+C*	*4.43*

Unquote

4.5.92 The Commission observed that the Petitioner had scheduled the power purchase from the Medium-Term generating sources under short term mode. The

Commission vide Data Deficiency Note sought justification on the same from the Petitioner. In reply, the Petitioner submitted the following:

Quote

The Hon'ble Commission may kindly appreciate that as per the prevailing CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, the transmission charges under medium term are levied on capacity basis i.e. in Rs/MW/Month while the same for short term is levied on per unit basis.

In view of the above provisions, the Company at the stage of circulating the tender for Medium Term Power Supply had explicitly mentioned in the bid condition that the Company may opt to schedule the power either through Medium Term Open Access or Short-Term Open Access. Based on the aforesaid bidding, the PPAs were signed and subsequently approved by the Hon'ble Commission as well.

As stated above, the Hon'ble Commission may kindly observe that the consumers of the Company have benefited from the saving in transmission charges due to scheduling of power on short term basis as against Medium Term basis as summarised in Table-4 below: -

Table-4: Computation of Medium-Term Power Transmission Charges

Month	*Energy (MU)*	*ST Transmission Charges (Rs. Cr.)*	*Avg. MT Transmission per MW/Month (Rs.)*	*MT Transmission Charges (Rs. Cr.)*	*Saving in Transmission Charges (Rs. Cr.)*
	A	*B*	*C*	*D*	*E = D-B*
DoP, Govt. of Arunachal Pradesh	*192.56*	*8.56*	*3,46,019*	*20.32*	*11.76*
DoP, Govt. of Arunachal Pradesh	*99.45*	*2.70*	*3,46,019*	*12.77*	*10.07*
GEE, H.P.	*33.22*	*0.92*	*3,55,280*	*2.93*	*2.02*
GoHP, H.P.	*109.55*	*2.93*	*3,55,280*	*9.04*	*6.11*
Total	***434.78***	***15.11***	***3,50,649***	***45.07***	***29.96***

The detailed computation of aforesaid saving is provided in Annexure-15 (Soft Copy in Excel) enclosed herewith. In order to optimise the cost as above, the Company scheduled medium term contract on short term basis in order to save the transmission charges for the ultimate benefit of Consumers.

Unquote

4.5.93 Further, the Commission vide Email dated February 08, 2023 directed the Petitioner to provide the power procurement details from Medium-Term sources, incorporating the information related to Rebate, Transmission losses, Incentive, Provisions etc. in the format, provided earlier also to the Petitioner at the time of True Up of ARR for FY 2020-21. In reply, the Petitioner submitted the information in the desired format.

4.5.94 The Commission found in the above response of the Petitioner that the Petitioner/ its Traders had not applied for the appropriate open access mode for the Medium-Term sources. The Commission, in this regard, has taken a view that due to non-scheduling of Medium Term source in appropriate mode, the scheduling of plant under Short Term mode resulted to the loss of flexibility to reschedule power. Thus, due to non-scheduling of Medium Term plants under appropriate mode the Commission is not in position to ascertain the availability of the plants. Therefore, the provisions and the incentives claimed by the Petitioner for procurement of power from the Medium-Term sources for FY 2021-22 are disallowed.

4.5.95 Further, the Commission is of the view that any charges over and above of the tariff approved by the Commission to source power from the Medium Term sources at NPCL periphery vide Orders dated February 28, 2020 in Petition No. 1552 of 2020 and Oder dated May 10, 2021 in the Petition No. 1671 of 2021 cannot be allowed to be passed on to the consumers.

4.5.96 Hence, the Commission based on the submission of the Petitioner has considered lower of the two values i.e. claimed vis-a-vis approved for each of the components of tariff to calculate the power purchase cost of the Petitioner from the Medium Term sources for FY 2021-22. The detailed calculations are shown in the Tables below:

Table 4-56: APPROVED PER UNIT COST FROM M/S APPCPL- SOURCE: DEPARTMENT OF POWER, GOVT. OF ARUNACHAL PRADESH (A.P.) FOR FY 2021-22 (Rs. / kWh)

Particular	Government of A.P. (Medium term)		
	Approved in Order dated 28.02.2020	Claimed in Petition	Approved Upon Truing Up
MU at NPCL Periphery		192.56	192.56
Fixed Charges (Rs. Crore)		39.20	39.20
Fixed Charges (Rs./kWh)	2.090	2.036	2.036
Energy Charges (Rs. Crore)		39.89	39.89
Energy Charges (Rs./kWh)	2.090	2.071	2.071
Amount (Rs. Crore)		79.09	79.09
Amount (Rs./kWh)	4.18	4.11	4.11

Particular	Government of A.P. (Medium term)		
	Approved in Order dated 28.02.2020	Claimed in Petition	Approved Upon Truing Up
Total Transmission (Rs. Crore)		10.10	10.10
Total Transmission (Rs./kWh)	1.00	0.52	0.52
Transmission Loss (Rs. Crore)		5.83	5.39
Transmission Loss (Rs./kWh)	0.28	0.30	0.28
Incentives (Rs. Crore)		0.00	0.00
Incentives (Rs./kWh)	0.00	0.00	0.00
Provisions of Fixed Cost (Rs. Crore)		2.48	0.00
Provisions of Fixed Cost (Rs./kWh)	0.00	0.13	0.00
Total (Rs. Crore)		**97.50**	**94.57**
Per Unit Cost (Rs./kWh)	**5.46**	**5.06**	**4.91**

TABLE 4-57: APPROVED PER UNIT COST FROM M/S APPCPL- SOURCE: DEPARTMENT OF POWER, GOVT. OF NAGALAND FOR FY 2021-22 (Rs. / kWh)

Particular	Government of Nagaland (Medium term)		
	Approved in Order dated 28.02.2020	Claimed in Petition	Approved Upon Truing Up
MU at NPCL Periphery		99.44	99.44
Fixed Charges (Rs. Crore)		19.88	19.88
Fixed Charges (Rs./kWh)	2.085	1.999	1.999
Energy Charges (Rs. Crore)		20.55	20.55
Energy Charges (Rs./kWh)	2.085	2.067	2.067
Amount (Rs. Crore)		40.44	40.44
Amount (Rs./kWh)	4.17	4.07	4.07
Total Transmission (Rs. Crore)		2.67	2.67
Total Transmission (Rs./kWh)	0.99	0.27	0.27
Transmission Loss (Rs. Crore)		3.09	2.98
Transmission Loss (Rs./kWh)	0.30	0.31	0.30
Incentives (Rs. Crore)		0.00	0.00
Incentives (Rs./kWh)	0.00	0.00	0.00
Provisions of Fixed Cost (Rs. Crore)		2.00	0.00
Provisions of Fixed Cost (Rs./kWh)	0.00	0.20	0.00
Total (Rs. Crore)		**48.20**	**46.09**
Per Unit Cost	**5.46**	**4.85**	**4.64**

TABLE 4-58: APPROVED PER UNIT COST FROM M/S APPCPL- SOURCE: GOODWILL ENERGY, HIMACHAL PRADESH FOR FY 2021-22 (Rs. / kWh)

Particular	Goodwill Energy (Medium term)		
	Approved in Order dated 28.02.2020	Claimed in Petition	Approved Upon Truing Up
MU at NPCL Periphery		33.22	33.22
Fixed Charges (Rs. Crore)		5.30	5.30

Particular	Goodwill Energy (Medium term)		
	Approved in Order dated 28.02.2020	Claimed in Petition	Approved Upon Truing Up
Fixed Charges (Rs./kWh)	1.695	1.594	1.594
Energy Charges (Rs. Crore)		5.51	5.51
Energy Charges (Rs./kWh)	1.695	1.660	1.660
Amount (Rs. Crore)		10.81	10.81
Amount (Rs./kWh)	3.390	3.25	3.25
Total Transmission (Rs. Crore)		0.91	0.91
Total Transmission (Rs./kWh)	0.79	0.27	0.27
Transmission Loss (Rs. Crore)		0.83	0.83
Transmission Loss (Rs./kWh)	0.25	0.25	0.25
Incentives (Rs. Crore)		0.01	0.00
Incentives (Rs./kWh)	0.00	0.00	0.00
Provisions of Fixed Cost (Rs. Crore)		0.31	0.00
Provisions of Fixed Cost (Rs./kWh)	0.00	0.09	0.00
Total (Rs. Crore)		**12.87**	**12.55**
Per Unit Cost	**4.43**	**3.87**	**3.78**

Table 4-59: APPROVED PER UNIT COST FROM M/S TPTCL SOURCE: DEPARTMENT OF POWER, GOVT. OF HIMACHAL PRADESH FOR FY 2021-22 (Rs. / kWh)

Particular	Government of Himachal Pradesh (Medium term)		
	Approved in Order dated 28.02.2020	Claimed in Petition	Approved Upon Truing Up
MU at NPCL Periphery		109.55	109.55
Fixed Charges (Rs. Crore)		16.55	16.55
Fixed Charges (Rs./kWh)	1.661	1.511	1.511
Energy Charges (Rs. Crore)		17.90	17.90
Energy Charges (Rs./kWh)	1.661	1.634	1.634
Amount (Rs. Crore)		34.45	34.45
Amount (Rs./kWh)	3.322	3.14	3.14
Total Transmission (Rs. Crore)		2.90	2.90
Total Transmission (Rs./kWh)	0.798	0.264	0.264
Transmission Loss (Rs. Crore)		2.69	2.69
Transmission Loss (Rs./kWh)	0.31	0.25	0.25
Incentives (Rs. Crore)		0.87	0.00
Incentives (Rs./kWh)	0.00	0.08	0.00
Provisions of Fixed Cost (Rs. Crore)		0.00	0.00
Provisions of Fixed Cost (Rs./kWh)	0.00	0.00	0.00
Total (Rs. Crore)		**40.90**	**40.03**
Per Unit Cost	**4.43**	**3.73**	**3.65**

4.5.97 The Commission, taking the above into consideration, approve the power purchase of the Petitioner from the Medium-Term Sources for FY 2021-22 as under:

TABLE 4-60: APPROVED MEDIUM TERM PURCHASE BY THE COMMISSION FOR FY 2021-22 (Rs. Crore)

Source	MU at Ex-Bus	Inter State Loss (%)	Intra State Loss (%)	MU at NPCL Bus	Fixed Charges (Rs. Cr.)	Energy Charges (Rs. Cr.)	Amount (Rs. Cr.)	Total Transmission (Rs. Cr.)	Total (Rs. Cr.)	Total (Rs. /kWh)
APPCPL- Govt. of AP	205.86	3.24%	3.33%	192.56	39.20	45.64	84.84	10.10	94.57	4.91
APPCPL- Govt. of Nagaland	106.33	3.25%	3.33%	99.45	19.88	23.64	43.52	2.67	46.09	4.64
APPCPL- Goodwill, HP	35.40	2.90%	3.33%	33.22	5.30	6.34	11.64	0.91	12.55	3.78
TPTCL- Govt of Himachal Pradesh	117.02	3.16%	3.33%	109.55	16.55	20.59	37.14	2.90	40.03	3.65
Total	**464.61**	**-**	**-**	**434.78**	**80.92**	**95.75**	**176.67**	**16.57**	**193.25**	**4.44**

4.5.98 It is observed that the quantum of power submitted by the Petitioner is lower in comparison to the approved /tied **up Quantum (MW) from Generating Sources. The Petitioner is directed to ensure that Generating Sources supply the minimum quantum as per its obligation in accordance to their respective PPA / Contracts and the Petitioner should maximise its off-take to minimize its power procurement cost. Further, in case minimum obligation as per PPA's / Contracts is not achieved, the settlements need to be done as per the provisions of PPA's / Agreements / Contracts with the Generators / Traders and the Petitioner is required to provide the detail of the same along with Tariff Petition.**

Power procurement from Renewable sources:

4.5.99 The power purchase cost from the Renewable sources for FY 2021-22 as submitted by the Petitioner is shown in the Table below: -

TABLE 4-61: POWER PROCUREMENT FOR RENEWABLE SOURCES SUBMITTED BY THE PETITIONER FOR 2021-22

Source	Units at NPCL bus (MU)	Total (Rs. Crore)	Per Unit Cost (Rs. /kWh)
Solar Power (GNIDA)	1.22	0.84	6.92
Solar Power (APPCPL)	0.41	0.21	5.13
Solar Power (Adani)	51.81	16.81	3.24
Solar Power (Tata)	4.64	1.50	3.24
Solar Power (Net Metering)	9.13	7.16	7.85
Wind Power (PTC)	32.04	12.24	3.82
Non-Solar (Exchange-RE)	73.93	40.33	5.45
APPCPL- (Source- DoP, GoAP)	6.44	3.20	4.97
APPCPL- (Source- DoP, Nagaland)	6.24	3.02	4.84
APPCPL- (Source- MePDCL, Meghalaya)	26.74	12.95	4.84
KREATE- (Source- E&PD, Govt of Sikkim)	15.23	7.39	4.85
Total	**227.83**	**105.65**	**4.64**

4.5.100 The Commission's approval for the above renewable sources along with approval Orders is enclosed below:

Source	Approved by the Commission (Yes/No)	Link
Solar Power (GNIDA)	Yes	https://www.uperc.org/App_File/1012-2015NoidaPowerCompanyLtd-pdf715201533327PM.pdf
Solar Power (APPCPL)	No	-
Solar Power (Adani)	Yes	https://www.uperc.org/App_File/1479order18-9-2019-pdf9242019111547AM.pdf
Solar Power (Tata)	Yes	https://www.uperc.org/App_File/1479order18-9-2019-pdf9242019111547AM.pdf
Solar Power (Net Metering)	Yes	Deemed approved
Wind Power (PTC)	Yes	https://www.uperc.org/App_File/Pt1228of2017orderdt-05-01-18-pdf152018124349PM.pdf
Non-Solar (Exchange-RE)	No	Deemed approved
APPCPL- (Source- DoP, GoAP)	Yes	https://www.uperc.org/App_File/OrderinPet1692of2021-pdf420202150824PM.pdf
APPCPL- (Source- DoP, Nagaland)	Yes	https://www.uperc.org/App_File/OrderinPet1692of2021-pdf420202150824PM.pdf
APPCPL- (Source- MePDCL, Meghalaya)	Yes	https://www.uperc.org/App_File/OrderinPet1692of2021-pdf420202150824PM.pdf
KREATE- (Source- E&PD, Govt of Sikkim)	Yes	https://www.uperc.org/App_File/OrderinPet1692of2021-pdf420202150824PM.pdf

4.5.101 The Commission vide Order dated July 14, 2015 in Petition No. 1012 of 2015 has approved tariff for NPCL to procure power from Solar Power (GNIDA). The relevant excerpt of the Order is reproduced below:

Quote

8. the Commission approves the Power Purchase Agreement (PPA) for purchase of 1 MWp solar PV power for a period of 10 years commencing from 01.03.2015.

9. Regarding the tariff, the Commission considers the provisions made under schedule –I (E) of UPERC (Captive and Renewable Energy Generating Plants) Regulations, and therefore allows the tariff of Rs. 7.06/kWh.

10. For any further extension of PPA, the matter shall be brought to the Commission for its approval. However, in any case, the tariff for extended period shall not exceed present allowed rate of Rs. 7.06/kWh.

Unquote

4.5.102 The Commission further observed that the Petitioner has claimed power procurement from Solar Power (GNIDA) at lower rate against the aforesaid Order. Therefore, the Commission has considered the actual value as claimed by the Petitioner for truing up for FY 2021-22.

4.5.103 The Commission observed that the Petitioner procured solar power from M/s APPCPL which is not approved by the Commission. However, the same is used to fulfil the RPO obligation of the Petitioner. Hence, the Commission considered the average GTAM (Solar) rate of FY 2021-22 for the solar power procured from M/s APPCPL. The Commission computed the GTAM (Solar) rate as shown in the Table below:

TABLE 4-62: AVERAGE GTAM (SOLAR) RATE CONSIDERED BY THE COMMISSION FOR 2021-22

Month	Total Price Paid (Rs. Crore)	Total Traded Volume (MU)	Average Price (Rs/kWh)
Apr-21	30.08	78.33	3.84
May-21	60.55	196.23	3.09
Jun-21	51.51	157.80	3.26
Jul-21	59.69	193.06	3.09
Aug-21	64.47	146.86	4.39
Sep-21	112.92	274.80	4.11
Oct-21	99.30	231.10	4.30
Nov-21	64.33	175.40	3.67
Dec-21	24.24	65.16	3.72
Jan-22	7.68	20.89	3.68
Feb-22	16.48	39.79	4.14
Mar-22	36.31	48.55	7.48
Total	**627.55**	**1,627.96**	**3.85**

4.5.104 The Commission vide Order dated September 18, 2019 in Petition No. 1479 of 2019 approved the tariff for NPCL to procure solar power from M/s Adani Energy (Mahoba Solar (UP) Pvt. Ltd, Ahmedabad) and M/s Tata Power. The relevant excerpts of the Order are reproduced below:

Quote

In view of all the submissions placed on record of the Commission, the commission adopts the tariffs as below:

S. No.	*Name of Bidders*	*Allotted Project Capacity (MW)*	*Final Tariff after e-reverse auctioning (Tariff for 25 years) in Rs./kWh*
9	*TATA Power Renewable Energy Ltd Mumbai (PPA Signed with NPCL)*	*25*	*3.08*
10	*Mahoba Solar (UP) Pvt Ltd, Ahmedabad (PPA Signed with NPCL)*	*25*	*3.08*

Unquote

4.5.105 The Commission further observed that the tariff rate claimed by the Petitioner for power procurement from M/s Adani Energy (Mahoba Solar (UP) Pvt. Ltd., Ahmedabad) and M/s Tata Power is lower than the approved tariff in aforesaid Order. Therefore, the Commission has considered the actual value as claimed by the Petitioner for truing up for FY 2021-22.

4.5.106 Further, in regard to power procured from the Solar power (Net Metering) the Commission observed that the energy rate claimed by the Petitioner is on higher side. As per the third proviso of Regulations 10.4(iii) and 10.4(iv) of UPERC (Rooftop Solar PV Grid Interactive Systems Gross/Net Metering) Regulations, 2019,

Quote

10.4(iii)

Provided also that in Net Metering arrangement, at the end of each settlement period, any electricity credits, which remain unadjusted, shall be paid at a Net Metering Rate of Rs 2/kWh by the Distribution Licensee or as notified by the Commission from time to time.

10.4(iv) When an eligible consumer leaves the system, the unused electricity credits for that consumer in case of Net Metering arrangement shall be paid at Net Metering Rate of Rs 2/kWh by the Distribution Licensee or as notified by the Commission from time to time.

Unquote

4.5.107 The Commission sought clarification from the Petitioner regarding the quantum of energy settled at the end of the FY 2021-22 as per the above Regulations. The Petitioner submitted that the following details:

Category	HV-1		HV-2		LMV-1M		LMV-3M		LMV-4		LMV-6		TOTAL	
Month	MU	Rs. Crore	MU	Rs. Crore	MU	Rs. Crore	MU	Rs. Crore	MU	Rs. Crore	MU	Rs. Crore	MU	Rs. Crore
Apr-21	0.67	0.58	0.48	0.33	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01	**1.21**	**0.96**
May-21	0.70	0.61	0.48	0.33	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**1.22**	**0.97**
Jun-21	0.63	0.53	0.38	0.27	0.13	0.08	0.02	0.02	0.01	0.01	0.01	0.01	**1.19**	**0.91**
Jul-21	0.47	0.40	0.20	0.14	-0.10	-0.06	0.01	0.01	0.00	0.00	0.01	0.00	**0.59**	**0.50**
Aug-21	0.32	0.27	0.14	0.10	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	**0.49**	**0.40**
Sep-21	0.27	0.24	0.15	0.10	0.20	0.12	0.01	0.01	0.00	0.00	0.00	0.00	**0.63**	**0.48**
Oct-21	0.35	0.28	0.25	0.17	-0.17	-0.10	0.01	0.01	0.00	0.00	0.01	0.00	**0.44**	**0.36**
Nov-21	0.32	0.27	0.27	0.19	0.02	0.01	0.01	0.01	0.01	0.00	0.01	0.00	**0.62**	**0.49**
Dec-21	0.19	0.18	0.14	0.09	0.29	0.17	0.01	0.01	0.01	0.00	0.00	0.00	**0.64**	**0.46**
Jan-22	0.18	0.16	0.18	0.12	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00	**0.40**	**0.31**
Feb-22	0.42	0.38	0.33	0.22	0.04	0.02	0.01	0.01	0.00	0.00	0.00	0.00	**0.81**	**0.64**
Mar-22	0.51	0.42	0.27	0.20	0.07	0.05	0.01	0.01	0.01	0.01	0.01	0.00	**0.88**	**0.68**
TOTAL*	**5.02**	**4.33**	**3.26**	**2.26**	**0.56**	**0.34**	**0.15**	**0.12**	**0.07**	**0.06**	**0.07**	**0.05**	**9.13**	**7.16**

Category	HV-1		HV-2		LMV-1M		LMV-3M		LMV-4		LMV-6		TOTAL	
Energy Settled at the end of FY	0.40	0.08	-	-	0.07	0.01	-	-	0.01	0.00	0.03	0.01	**0.51**	**0.10**

* Based on the Audited Accounting Statement, Petitioner has included Rs. 7.16 Cr in both, i.e. the Power Purchase cost as well as the Billed Revenue keeping the net impact on ARR and Revenue as neutral.

4.5.108 The Commission observed that the energy banked by the consumers is utilised in the same financial year for which no bill is generated by the Petitioner. In other words, the energy banked, which is considered as purchase by the Petitioner, is returned in the following month, which is considered as sales by the Petitioner and hence no treatment is required for adjustment. Therefore, the energy that remains unadjusted at the end of the year is the quantum of energy that has been banked and considered as purchase by the Petitioner at Tariff approved in the third proviso of Regulations 10.4(iii) and 10.4(iv) in the UPERC (Rooftop Solar PV Grid Interactive Systems Gross/Net Metering) Regulations, 2019.

4.5.109 The Commission vide Order dated January 23, 2018 in Petition No. 1228 of 2017 approved the tariff for NPCL to procure Wind Power from PTC India Limited. The relevant excerpts of the Order are reproduced below:

Quote

6. In the hearing the Petitioner informed that to meet their renewable purchase obligations, this is the most reasonable rate on which the company is proposing to purchase 10MW wind power. Further, in this case the interstate transmission charges and losses are also not to be paid, as per the Government of India directives.

7. The Commission does not find any objection in this proposal therefore the Commission adopts the tariff of Rs.3.53 per unit including a trading margin of Rs.0.07 per unit. The purchase will be strictly as per the Power Purchase Agreement approved by M/s SECIL.

Unquote

4.5.110 The Commission observed that the Petitioner claimed lower tariff rate for the procurement of wind power from PTC India Limited ex-bus against the Commission approved rate at Ex-bus in aforesaid Order and the same is approved by the Commission.

4.5.111 Further, it has also been observed that in the Non-Solar Power procured from

Exchange-RE, the Petitioner claimed the APPCPL's Trading Margin @ Rs. 0.03/kWh and GST @ 18% thereon. The Petitioner as a Distribution Licensee is deemed Trader as per 9th proviso of Section 14 (Grant of licence) of EA 2003 which states that a distribution licensee shall not require a licence to undertake trading in electricity. Thus, the Commission is of the view that NPCL can purchase power directly from the exchange. Therefore, the Commission is disallowing the trading margin of APPCPL including GST on purchase of Non-Solar Power (Exchange-RE).

4.5.112 The Commission approved the power procurement cost from M/s APPCPL (Sources: Department of Power, Govt. of Arunachal Pradesh, Department of Power, Govt. of Nagaland and MePDCL, Govt. of Meghalaya) and M/s Kreate Energy (Source: Energy & Power Department, Govt. of Sikkim) under Short Term at CTU periphery vide order dated April 20, 2021 (Petition No. 1692 of 2021). The relevant extract of aforesaid Order is reproduced below:

Quote

Table-5:

S. No.	Bidder (Source)	Period	Duration (Hrs.)	Quantum (MW)	Rate at CTU Periphery of Seller (Rs./kWh)
1	M/s Arunachal Pradesh Power Corporation Pvt Ltd (Department of Power, Govt of Nagaland)	1st April, 2021 to 30th September, 2021 (Except Sundays)	00:00 to 04:00	12	4.3
2	M/s Arunachal Pradesh Power Corporation Pvt Ltd (Department of Power, Govt of Arunachal Pradesh)	1st April, 2021 to 30th September, 2021 (Except Sundays)	19:00 to 24:00	10	4.44
3	M/s Arunachal Pradesh Power Corporation Pvt Ltd (MePDCL, Meghalaya)	1st April, 2021 to 30th September, 2021 (Except Sundays)	00:00 to 04:00	15	4.3
		1st May, 2021 to 30th September, 2021 (Except Sundays)	12:00 to 17:00	15	4.32
		1st April, 2021 to 30th April, 2021 (Except Sundays)	19:00 to 24:00	15	4.44
		1st May, 2021 to 30th September, 2021 (Except Sundays)	19:00 to 24:00	15	4.44
4	M/s Kreate Energy Pvt Ltd (E&PD, Govt. of Sikkim)	1st April, 2021 to 30th September, 2021 (Except Sundays)	00:00 to 04:00	5	4.3
		1st May, 2021 to 30th September, 2021 (Except Sundays)	12:00 to 17:00	10	4.31
		1st April, 2021 to 30th April, 2021 (Except Sundays)	19:00 to 24:00	10	4.44
		1st May, 2021 to 30th September, 2021 (Except Sundays)	19:00 to 24:00	10	4.44
5	**Wt. Average Tariff (Rs. /kWh)**		-	-	**4.36**

Unquote

4.5.113 The Commission in aforesaid Order has approved the rate of power of different sources time-slot wise. The Commission vide E-mail dated February 08, 2023 sought details of quantum of power purchase at each slot for which the Commission has approved the rate. In reply the Petitioner submitted the details of slot wise power purchase for the aforesaid sources as shown in table below:

TABLE 4-63: SLOTWISE DETAILS OF POWER PURCHASE SUBMITTED BY THE PETITIONER FOR 2021-22

Seller	Month	Duration	Energy at Ex-Bus (MU)	Cost of Power (Rs. Crore)	Ex-Bus Rate* (Rs./kWh)
M/s Arunachal Pradesh Power Corporation Pvt Ltd (Department of Power, Govt of Arunachal Pradesh)	May-21	19:00-24:00	1.64	0.71	4.35
	Jun-21	19:00-24:00	1.30	0.57	4.35
	Jul-21	19:00-24:00	1.35	0.59	4.35
	Aug-21	19:00-24:00	1.30	0.57	4.35
	Sep-21	19:00-24:00	1.30	0.57	4.35
M/s Arunachal Pradesh Power Corporation Pvt Ltd (Department of Power, Govt of Nagaland)	Apr-21	00:00-04:00	0.38	0.16	4.21
	May-21	00:00-04:00	1.25	0.53	4.21
	Jun-21	00:00-04:00	1.25	0.53	4.21
	Jul-21	00:00-04:00	1.30	0.55	4.21
	Aug-21	00:00-04:00	1.25	0.53	4.21
	Sep-21	00:00-04:00	1.25	0.53	4.21
M/s Arunachal Pradesh Power Corporation Pvt Ltd (MePDCL, Meghalaya)	Apr-21	00:00-04:00	0.48	0.20	4.21
		19:00-24:00	0.60	0.26	4.35
	May-21	00:00-04:00	1.56	0.66	4.21
		12:00-17:00	1.95	0.83	4.23
	Jun-21	19:00-24:00	1.95	0.85	4.35
		00:00-04:00	1.56	0.66	4.21
	Jul-21	12:00-17:00	1.95	0.83	4.23
		19:00-24:00	1.95	0.85	4.35
	Aug-21	00:00-04:00	1.62	0.68	4.21
		12:00-17:00	2.03	0.86	4.23
	Sep-21	19:00-24:00	2.03	0.88	4.35
		00:00-04:00	1.56	0.66	4.21
M/s Kreate Energy Pvt Ltd (E&PD, Govt. of Sikkim))	Apr-21	00:00-04:00	0.16	0.07	4.21
		19:00-24:00	0.40	0.17	4.35
	May-21	00:00-04:00	0.52	0.22	4.21
		12:00-17:00	1.30	0.55	4.22
	Jun-21	19:00-24:00	1.30	0.57	4.35

Seller	Month	Duration	Energy at Ex-Bus (MU)	Cost of Power (Rs. Crore)	Ex-Bus Rate* (Rs./kWh)
		00:00-04:00	0.52	0.22	4.21
	Jul-21	12:00-17:00	1.30	0.55	4.22
		19:00-24:00	1.30	0.57	4.35
	Aug-21	00:00-04:00	0.54	0.23	4.21
		12:00-17:00	1.35	0.57	4.22
	Sep-21	19:00-24:00	1.35	0.59	4.35
		00:00-04:00	0.52	0.22	4.21

** Ex-Bus Rate is net of rebate @ 2%.*

4.5.114 Accordingly, the Commission has considered lower of the two values i.e., claimed by the Petitioner and approved by the Commission vide order dated April 20, 2021 (Petition No. 1692 of 2021) for truing up for FY 2021-22 for approval of power procurement from aforesaid sources.

4.5.115 The Commission observed that CTU / PGCIL waived inter-state transmission charges & losses transmission for procurement of power from Solar and wind power on long-term basis. In this regard, Para 4 (i) of the Order dated 13.02.2018 of the Ministry of Power, GoI (later replaced by Para 3 (a) of the notification dated 05.08.2020) provides as under:

Quote

4.0 In supersession of Ministry of Power's earlier order No. 23/12/2016-R&R dated 30th September, 2016 and Order No. 23/12/2016-R&R dated 14th June, 2017, it is hereby notified that –

For generation projects based on solar and wind resources, no interstate transmission charges and losses will be levied on transmission of the electricity through the inter-state transmission system for sale of power by such projects commissioned till 31st March 2020.

Provided that the above waiver will be available for a period of 25 years from the date of commissioning of such projects.

Unquote

4.5.116 Further, the Hon'ble Central Electrcity Regulatory Commission (CERC) has amended its Sharing Regulations, 2010 as follows:

Quote

(aa) No transmission charges and losses for the use of ISTS network shall be payable for the generation based on solar and wind power resources for a period of 25 years from the date of commercial operation of such generation projects if they fulfill the following conditions:

(i) Such generation capacity has been awarded through competitive bidding process in accordance with the guidelines issued by the Central Government;

(ii) Such generation capacity has been declared under commercial operation between 13.2.2018 till 31.3.2022;

Unquote

4.5.117 Also, the Commission notified UPERC (Captive and Renewable Energy Generating Plants) Regulations, 2019 (CRE Regulations, 2019) which exempted the Intra-State Transmission charge for renewable source. The relevant extract is as below: -

Quote

26 Open Access

b) Renewable Energy based Generating Power Plant

I. *A Renewable Energy based Generating Power Plant shall have right to 'open access' for carrying electricity from its plant to the destination of its use by using transmission and / or distribution system or associated facilities with such lines or system and for that purpose, Rules, Regulations and Orders passed by the Appropriate Commission shall apply.*
II. *The plant seeking 'Open Access' within or outside the State through the grid shall be regulated under Regulations specified by the Appropriate Commission.*
III. *The plant or the consumer, seeking 'Open Access' to the State and / or Inter State Transmission Systems and / or distribution system for carrying the electricity generated by it to the destination of use, shall pay the*

transmission charges, wheeling charges and such other charges for use of such facilities as determined by the Appropriate Commission(s).

Provided for large scale stand-alone solar projects set up for sale of power to electricity distribution Company or Third party or Captive use, there shall be exemption of 50% on Wheeling charges/ Transmission charges on Intrastate Sale of Power and 100% exemption on Intrastate Transmission system on Interstate sale of solar power. This exemption is as per the provisions provided in UP Solar Energy Policy, 2017.

IV. *In case, the power generated from RE source based generating plant is supplied to a consumer, then such consumer shall pay charges as per the provisions of UPERC Open Access Regulations. Provided for large scale stand-alone solar projects set up for sale of power to Electricity distribution Company or Third party or Captive use, there shall be 100 % exemption from State cross subsidy surcharge for Interstate sale of solar power. This exemption is as per the provisions provided in UP Solar Energy Policy, 2017.*

Unquote

4.5.118 In light of the above Regulations, the Commission considered the Inter-State transmission losses & charges as nil for solar and wind Renewable sources and intrastate transmission charges as 50% of the approved value for FY 2021-22 for solar sources for determining the transmission charges of Renewable sources for FY 2021-22. However, the application fees and scheduling charges paid by the Petitioner for scheduling Renewable power from inter & intrastate transmission network is considered by the Commission.

4.5.119 The Commission observed that Uttar Pradesh Power Transmission Corporation Limited (UPPTCL) billed the solar units @ 50% of approved transmission tariff. Further, in Deficiency Note UPPTCL is directed to clarify whether such rebate of 50% is irrespective of type of open access (LTA, MTA or STA). In its reply, UPPTCL submitted that considering the provisions of UP Solar Policy, UPPTCL is billing the transmitted energy quantum @ 50% of the approved transmission tariff, which is scheduled from intra-state solar generators for all type of access (LTOA/MTOA/STOA) of intra state transmission system.

4.5.120 Further, the Commission once again reiterates that in future the Petitioner should strictly follow the Central Government Guidelines namely 'Guidelines for short term (i.e. for a period more than one day to one year) Procurement of power by Distribution Licensees through Tariff based bidding process' dated March 30, 2016. The link for the same is provided below:

(https://www.mstcecommerce.com/auctionhome/RenderFileGeneralAuctions.jsp?file=PPA-Revised-Guidelines-Short-Term.pdf).

Further, the Petitioner must take prior approvals of the Commission.

4.5.121 Based on the above observations the Commission approves the power purchase from renewable sources as shown in the table below:

TABLE 4-64: APPROVED RENEWABLE POWER PURCHASE BY THE COMMISSION FOR FY 2021-22 (Rs. Crore)

Source	MU at Ex-Bus	Inter State Loss (%)	Intra State Loss (%)	MU at NPCL Bus	Fixed Charges (Rs. Cr.)	Energy Charges (Rs. Cr.)	Amount (Rs. Cr.)	Total Transmission (Rs. Cr.)	Total (Rs. Cr.)	Total (Rs. /kWh)
Solar Power (GNIDA)	1.22	0.00%	0.00%	1.22	-	0.84	0.84	-	0.84	6.92
Solar Power (APPCPL)	0.41	0.00%	0.00%	0.41	-	0.16	0.16	-	0.16	3.85
Solar Power (Adani)	53.60	0.00%	3.33%	51.39	-	16.05	16.05	0.62	16.67	3.24
Solar Power (Tata)	4.80	0.00%	3.33%	4.64	-	1.45	1.45	0.06	1.50	3.24
Solar Power (Net Metering)	0.51	0.00%	0.00%	0.51	-	0.10	0.10	-	0.10	2.00
Wind Power (PTC)	33.15	0.00%	3.33%	32.04	-	11.47	11.47	0.77	12.24	3.82
Non-Solar (Exchange-RE)	79.12	3.34%	3.33%	73.93	-	38.05	38.05	2.07	40.15	5.43
APPCPL- (Source- DoP, GoAP)	6.89	3.25%	3.33%	6.44	-	3.00	3.00	0.20	3.20	4.97
APPCPL- (Source- DoP, Nagaland)	6.67	3.25%	3.33%	6.24	-	2.81	2.81	0.21	3.02	4.84
APPCPL- (Source- MePDCL, Meghalaya)	28.59	3.24%	3.33%	26.74	-	12.21	12.21	0.74	12.95	4.84
KREATE- (Source- E&PD, Govt of Sikkim)	16.28	3.24%	3.33%	15.23	-	6.96	6.96	0.42	7.39	4.85
Total	**230.79**			**218.79**	-	**93.10**	**93.10**	**5.09**	**98.22**	**4.49**

TABLE 4-65: APPROVED POWER PURCHASE FROM RENEWABLE SOURCES Vs CLAIMED BY THE PETITIONER FOR FY 2021-22

Particulars	Claimed in Petition for FY 2021-22			Approved Upon Truing Up for FY 2021-22		
	Energy at NPCL Periphery (MU)	Per Unit cost (Rs. /kWh)	Power Purchase Cost (Including Trans. Charges) (Rs. Crore)	Energy at NPCL Periphery (MU)	Per Unit cost (Rs./kWh)	Power Purchase Cost (Including Trans. Charges) (Rs. Crore)
Solar Power (GNIDA)	1.22	6.92	0.84	1.22	6.92	0.84
Solar Power (APPCPL)	0.41	5.13	0.21	0.41	3.85	0.16
Solar Power (Adani)	51.81	3.24	16.81	51.81	3.24	16.67
Solar Power (Tata)	4.64	3.24	1.50	4.64	3.24	1.50
Solar Power (Net Metering)	9.13	7.85	7.16	0.51	2.00	0.10
Wind Power (PTC)	32.04	3.82	12.24	32.04	3.82	12.24
Non-Solar (Exchange-RE)	73.93	5.45	40.33	73.93	5.43	40.12
APPCPL- (Source- DoP, GoAP)	6.44	4.97	3.20	6.44	4.97	3.20
APPCPL- (Source- DoP, Nagaland)	6.24	4.84	3.02	6.24	4.84	3.02
APPCPL- (Source- MePDCL, Meghalaya)	26.74	4.84	12.95	26.74	4.84	12.95
KREATE- (Source- E&PD, Govt of Sikkim)	15.23	4.85	7.39	15.23	4.85	7.39
Power Procurement from Renewable source	**227.83**	**4.64**	**105.65**	**218.79**	**4.49**	**98.22**

4.5.122 The Commission in UPERC (Promotion of Green Energy through Renewable Purchase Obligation) (First Amendment) Regulations, 2019 provided the Renewable Purchase Obligation (RPO) to be met by the Licensee for FY 2021-22 as shown in the Table below: -

Year	Minimum quantum of purchase from renewable energy sources as % of total energy consumed (in kWh)			
	Non-Solar		Solar (%)	Total (%)
	Other Non-Solar (%)	HPO (%)		
	(1)	(2)	(3)	(4)=(1)+(2)+(3)
FY 2021-22	6.00	3.00	4.00	13.00

4.5.123 The Commission directed the Petitioner to submit RPO computation as per the format sent vide Letter No. UPERC/Secy/D(Tariff)/2022-23-1372 dated December 26, 2022. The compliance status of RPO submitted by the Petitioner for FY 2021-22 is as shown in the Table below:

TABLE 4-66: RPO DETAILS AS SUBMITTED BY NPCL FOR FY 2021-22 (MU)

RE Power	Opening Unfulfilled Obligation	Obligation for the year	Obligation met during the year*	Balance Obligation Carried Forward
Solar	44.62	75.14	96.28	23.48
Non-Solar	140.52	112.71	160.63	92.60
Hydro Power	(12.71)	56.36	0.00	43.65
Total	**172.42**	**244.21**	**256.90**	**159.73**

** including gross generation under net-metering arrangements*

4.5.124 The Commission vide Deficiency Note directed the Petitioners to submit the status for RPO compliance for FY 2021-22 along with proposed MU to be purchased from each power sources viz., solar, non-solar and hydro. In reply the Petitioner submitted revised RPO calculation for FY 2021-22, as shown in the Table below:

TABLE 4-67: REVISED RPO CALCULATION SUBMITTED BY NPCL FOR FY 2021-22 (MU)

S. No.	Particular	Reference	FY 2021-22
			Quantum (MU)
1	Energy Consumption (Sales)	A	2,338.04
2	Distribution Loss (%)	I	0.00%
3	**Energy Consumption at Discom Periphery**	**B**	**2,338.04**
4	Hydro Purchase during the year (Large Hydro excluding Hydro purchase considered under HPO i.e, before March 08, 2019)	C=C1+C2	491.04
4.1	Hydro Purchase from inter-State Sources (MU)	C1	491.04
4.2	Hydro Purchase from Inter-State Sources (MW)	C1'	56.06
4.3	Hydro Purchase from intra-State Sources (MU)	C2	0.00
4.4	Hydro Purchase from intra-State Sources (MW)	C2'	0.00
4.5	Inter-State Transmission Loss (%)	D	3.20%

S. No.	Particular	Reference	FY 2021-22
			Quantum (MU)
4.6	Hydro Purchased at State Periphery (MU)	E=C1*(1-D)	475.32
4.7	Intra-State Transmission Loss (%)	F	3.33%
4.8	**Hydro Purchase at Distribution Periphery (MU)**	**G=E+C2**	**459.49**
5	Net Power Sale for RPO computation	H=B-G	1,878.54
5.1	Total Obligation for the year (%)		
5.2	Solar (%)	J	4%
5.3	Non Solar (%)	K	6%
5.4	HPO obligation for the year (%)	L	3%
6	Total Obligation for year		
6.1	Solar (MU)	M=H*J	75.14
6.2	Non Solar (MU)	N=H*K	112.71
6.3	HPO Obligation for the year (MU)	O=H*L	56.36
7	**Total Obligation for the year(MU)**	**P=M+N+O**	**244.21**
8	Total RPO Fulfilled during the year		
9	Solar Purchase (MU)	Q=Q1+Q2	69.51
9.1	Solar Purchase from Inter-State Sources (MU)	Q1	0.00
9.2	Solar Purchase from Inter-State Sources (MW)	Q1'	0.00
9.3	Solar Purchase from Intra-State Sources (MU)	Q2	69.51
9.3A	Solar Generation Net metered Consumers (Self Consumption) (MU)	Q2A	30.08
9.4	Solar Purchase from Intra-State Sources (MW)	Q2'	7.94
9.5	Inter-State Transmission Loss (%)	C	3.20%
9.6	Solar Purchased at State Periphery (MU)	R=Q1	0.00
9.7	Intra-State Transmission Loss (%)	F	3.33%
9.8	**Solar Purchase at Distribution Periphery (MU)**	**S=(Q2+Q2A+R)**	**96.28**
10	Non Solar (MU)	T=T1+T2	171.65
10.1	Non Solar Purchase from Inter-State Sources (MU)	T1	171.65
10.2	Non Solar Purchase from Inter-State Sources (MW)	T1'	19.60
10.3	Non Solar Purchase from Intra-State Sources (MU)	T2	0.00
10.4	Non Solar Purchase from Intra-State Sources (MW)	T2'	0.00
10.5	Inter-State Transmission Loss (%)	C	3.20%
10.6	Non Solar Purchased at State Periphery (MU)	U=T1	166.16
10.7	Intra-State Transmission Loss (%)	F	3.33%
10.8	**Non Solar Purchase at Distribution Periphery (MU)**	**V=(T2+U)**	**160.63**
11	HPO (MU)	W=W1+W2	0.00
11.1	HPO from Inter-State Sources (MU)	W1	0.00
11.2	HPO from Inter-State Sources (MW)	W1'	0.00
11.3	HPO from Intra-State Sources (MU)	W2	0.00
11.4	HPO from Intra-State Sources (MW)	W2'	0.00
11.5	Inter-State Transmission Loss (%)	C	3.20%
11.6	HPO Purchased at State Periphery (MU)	X=W1*(1-C)	0.00
11.7	Intra-State Transmission Loss (%)	F	3.33%
11.8	**HPO at Distribution Periphery (MU)**	**Y=(W2+F)**	**0.00**
12	**Total RPO to be fulfilled**	**Z=S+V+Y**	**256.91**
13	**Balance Obligation to be fulfilled for the year**	**ZY=AA+AB+AC**	**(12.70)**
13.1	Solar (MU)	AA	(21.14)
13.2	Non Solar (MU)	AB	(47.91)
13.3	HPO Obligation for the vear (MU)	AC	56.36

4.5.125 Further, due to a linking error the RPO for FY 2020-21 in the Tariff Order for FY 2022-23 dated July 20, 2022, computed on ex-bus power requirement. Accordingly, the same is corrected and shown below, and to be considered as the correct RPO compliance status for FY 2020-21.

4.5.126 The RPO compliance status computed for FY 2020-21 is shown in the Table below:

TABLE 4-68: RPO APPROVED BY THE COMMISSION FOR FY 2020-21

S.No	Particular	Reference	Quantum (MU)
1	Energy Consumption (Sales) (MU)	A	2,014.56
2	Distribution Loss (%)	I	7.92%
3	Energy Consumption at NPCL Periphery (MU)	B	2,187.83
4	Hydro Purchase during the year (Large Hydro excluding Hydro purchase considered under HPO i.e. before March 08, 2019)	C=C1+C2	314.65
4.1	Hydro Purchase from Inter-State Sources (MU)	C1	314.65
4.2	Hydro Purchase from Inter-State Sources (MW)	C1'	
4.3	Hydro Purchase from Intra-State Sources (MU)	C2	0.00
4.44	Hydro Purchase from Intra-State Sources (MW)	C2'	0.00
4.5	Inter-State Transmission Loss (%)	D	3.42%
4.6	Hydro Purchased at State Periphery (MU)	E=C1*(1-D)	303.89
4.7	Intra-State Transmission Loss (%)	F	3.37%
4.8	Hydro Purchase at Distribution Periphery (MU)	G=(B2+D)*(1-F)	293.65
5	Net Power Sale for RPO computation	H=B-G	1,894.19
5.1	Total Obligation for the year (%)		
5.2	Solar (%)	J	3%
5.3	Non Solar (%)	K	6%
5.4	HPO Obligation for the year (%)	L	2%
6	Total Obligation for year		
6.1	Solar (MU)	M=H*J	56.83
6.2	Non Solar (MU)	N=H*K	113.65
6.3	HPO Obligation for the year (MU)	O=H*L	37.88
7	Total Obligation for the year(MU)	P=M+N+O	208.36
8	Total RPO Fulfilled during the year		
9	Solar Purchase (MU)	Q=Q1+Q2	54.00
9.1	Solar Purchase from Inter-State Sources (MU)	Q1	13.37
9.2	Solar Purchase from Inter-State Sources (MW)	Q1'	0.00
9.3	Solar Purchase from Intra-State Sources (MU)	Q2	40.63
9.4	Solar Purchase from Intra-State Sources (MW)	Q2'	
9.5	Inter-State Transmission Loss (%)	C	3.42%
9.6	Solar Purchased at State Periphery (MU)	R=Q1*(1-C)	12.91
9.7	Intra-State Transmission Loss (%)	F	3.37%
9.8	Solar Purchase at Distribution Periphery (MU)	S=(Q2+R)*(1-F)	51.74
10	Non Solar (MU)	T=T1+T2	35.90
10.1	Non Solar Purchase from Inter-State Sources (MU)	T1	35.90
10.2	Non Solar Purchase from Inter-State Sources (MW)	T1'	14.20
10.3	Non Solar Purchase from Intra-State Sources (MU)	T2	0.00
10.4	Non Solar Purchase from Intra-State Sources (MW)	T2'	0.00
10.5	Inter-State Transmission Loss (%)	C	3.42%

S.No	Particular	Reference	Quantum (MU)
10.6	Non Solar Purchased at State Periphery (MU)	U=T1*(1-C)	34.67
10.7	Intra-State Transmission Loss (%)	F	3.37%
10.8	Non Solar Purchase at Distribution Periphery (MU)	V=(T2+U)*(1-F)	33.50
11	HPO (MU)	W=W1+W2	70.97
11.1	HPO from Inter-State Sources (MU)	W1	70.97
11.2	HPO from Inter-State Sources (MW)	W1'	10.00
11.3	HPO from Intra-State Sources (MU)	W2	0.00
11.4	HPO from Intra-State Sources (MW)	W2'	0.00
11.5	Inter-State Transmission Loss (%)	C	3.42%
11.6	HPO Purchased at State Periphery (MU)	X=W1*(1-C)	68.54
11.7	Intra-State Transmission Loss (%)	F	3.37%
11.8	HPO at Distribution Periphery (MU)	Y=(W2+X)*(1-F)	66.23
12	Total RPO to be fulfilled	Z=S+V+Y	151.47
13	Balance Obligation to be fulfilled for the year	ZY=AA+AB+AC	56.89
13.1	Solar (MU)	AA	5.09
13.2	Non Solar (MU)	AB	80.15
13.3	HPO Obligation for the year (MU)	AC	(28.35)

TABLE 4-69: REVISED RPO STATUS COMPUTED BY COMMISSION FOR FY 2020-21 (MU)

RE Power	Opening Unfulfilled Obligation (for FY 2020-21)	Obligation for the year	Obligation met during the year	Closing Unfulfilled Obligation (for FY 2020-21)
Solar	91.17	56.83	51.74	96.25
Non-Solar	76.62	113.65	33.50	156.77
Hydro	20.81	37.88	66.23	(7.54)
Total	**188.59**	**208.36**	**151.47**	**245.49**

4.5.127 Further, the Commission sought gross generation from Rooftop solar for the FY 2021-22. The Petitioner in its reply submitted the details as shown in table below:

Table 4-70: Solar Gross Generation and Net Metering

Consumer Category	Gross Generation by Net metering Consumers (MU)	Energy Settled at the end of Year (MU)
HV-1	16.69	0.40
HV-2	18.02	0.00
LMV-1	2.42	0.07
LMV-3	0.25	0.00
LMV-4	0.46	0.01
LMV-6	0.36	0.03
Total	**38.20**	**0.51**

4.5.128 The Commission is of the view that RPO Compliance to be computed by considering the energy at Discom periphery. Therefore, from FY 2021-22 onwards, the Commission found it deemed fit to revise the methodology to compute RPO by considering energy at Discom periphery. The RPO compliance computed by the Commission for FY 2021-22 is as shown in the Table below:

TABLE 4-71: RPO COMPUTED FOR FY 2021-22

S. No.	Particular	Reference	Quantum (MU)
1	Energy Consumption (Sales)	A	2,338.04
2	Distribution Loss (%)	I	7.80%
3	Energy Consumption at NPCL Periphery	B	2535.84
4	Hydro Purchase during the year (Large Hydro excluding Hydro purchase considered under HPO i.e. before March 08, 2019)	C=C1+C2	491.04
4.1	Hydro Purchase from Inter-State Sources (MU)	C1	491.04
4.2	Hydro Purchase from Inter-State Sources (MW)	C1'	160.00
4.3	Hydro Purchase from Intra-State Sources (MU)	C2	0.00
4.44	Hydro Purchase from Intra-State Sources (MW)	C2'	0.00
4.5	Inter-State Transmission Loss (%)	D	3.20%
4.6	Hydro Purchased at State Periphery (MU)	E=C1*(1-D)	475.32
4.7	Intra-State Transmission Loss (%)	F	3.33%
4.8	Hydro Purchase at Distribution Periphery (MU)	G=(B2+D)*(1-F)	459.49
5	Net Power Sale for RPO computation	H=B-G	2,076.34
5.1	Total Obligation for the year (%)		
5.2	Solar (%)	J	4%
5.3	Non Solar (%)	K	6%
5.4	HPO Obligation for the year (%)	L	3%
6	Total Obligation for year		
6.1	Solar (MU)	M=H*J	83.05
6.2	Non Solar (MU)	N=H*K	124.58
6.3	HPO Obligation for the year (MU)	O=H*L	62.29
7	Total Obligation for the year(MU)	P=M+N+O	269.92
8	Total RPO Fulfilled during the year		
9	Solar Purchase (MU)	Q=Q1+Q2	59.64
9.1	Solar Purchase from Inter-State Sources (MU)	Q1	0.00
9.2	Solar Purchase from Inter-State Sources (MW)	Q1'	0.00
9.3	Solar Purchase from Intra-State Sources (MU)	Q2	59.64
9.4	Solar Purchase from Intra-State Sources (MW)	Q2'	6.81
9.5	Inter-State Transmission Loss (%)	C	3.20%
9.6	Solar Purchased at State Periphery (MU)	R=Q1*(1-C)	0.00
9.7	Intra-State Transmission Loss (%)	F	3.33%
9.8	Solar Generation from Net Metering (MU)	R1	38.20
9.9	Solar Purchase at Distribution Periphery (MU)	S=(Q2+R)*(1-F)+R1	95.85
10	Non Solar (MU)	T=T1+T2	171.65
10.1	Non Solar Purchase from Inter-State Sources (MU)	T1	171.65
10.2	Non Solar Purchase from Inter-State Sources (MW)	T1'	57.00
10.3	Non Solar Purchase from Intra-State Sources (MU)	T2	0.00
10.4	Non Solar Purchase from Intra-State Sources (MW)	T2'	0.00
10.5	Inter-State Transmission Loss (%)	C	3.20%
10.6	Non Solar Purchased at State Periphery (MU)	U=T1*(1-C)	166.16

S. No.	Particular	Reference	Quantum (MU)
10.7	Intra-State Transmission Loss (%)	F	3.33%
10.8	Non Solar Purchase at Distribution Periphery (MU)	V=(T2+U)*(1-F)	160.63
11	HPO (MU)	W=W1+W2	0.00
11.1	HPO from Inter-State Sources (MU)	W1	0.00
11.2	HPO from Inter-State Sources (MW)	W1'	0.00
11.3	HPO from Intra-State Sources (MU)	W2	0.00
11.4	HPO from Intra-State Sources (MW)	W2'	0.00
11.5	Inter-State Transmission Loss (%)	C	3.20%
11.6	HPO Purchased at State Periphery (MU)	X=W1*(1-C)	0.00
11.7	Intra-State Transmission Loss (%)	F	3.33%
11.8	HPO at Distribution Periphery (MU)	Y=(W2+X)*(1-F)	0.00
12	Total RPO to be fulfilled	Z=S+V+Y	256.48
13	Balance Obligation to be fulfilled for the year	ZY=AA+AB+AC	13.44
13.1	Solar (MU)	AA	(12.80)
13.2	Non Solar (MU)	AB	(36.05)
13.3	HPO Obligation for the year (MU)	AC	62.29

TABLE 4-72: RPO STATUS COMPUTED BY COMMISSION UP TILL FY 2021-22

RE Power	Opening Unfulfilled Obligation (FY 2021-22)	Obligation for the year	Obligation met during the year	Closing Unfulfilled Obligation (for FY 2021-22)
Solar	96.25	83.05	95.85	83.45
Non-Solar	156.77	124.58	160.63	120.72
HPO	(7.54)	62.29	0.00	54.75
Total	245.49	269.92	256.48	258.93

4.5.129 **The Commission directs the Petitioner to follow the RPO Trajectory set by the Commission in its first Amendment to the RPO Regulations, 2010 dated August 16, 2019 and submit RPO compliance along with Tariff Fillings.**

Power Procurement from Short Term Sources:

4.5.130 The Petitioner submitted the detail of power purchase from short term sources as shown in the Table below:

TABLE 4-73: POWER PROCUREMENT FOR SHORT TERM SUBMITTED BY THE PETITIONER FOR FY 2021-22

Source	MU at Ex-bus	Inter State Loss (%)	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (in Rs. Cr)	Energy Charges (in Rs. Cr)	Amount (in Rs. Cr)	PGCIL Charges (Rs. Cr)	UPPTCL charges (Rs. Cr)	Total Transmission (Rs. Cr)	Total (in Rs. Cr)	Per Unit Cost
APPCPL (Source-HSPPL)	24.18	3.25%	3.33%	22.62	0.00	15.93	15.93	0.001	0.59	0.59	16.52	7.30
APPCPL (Source-SEMCORP)	24.26	3.26%	3.33%	22.68	0.00	16.30	16.30	0.004	0.64	0.65	16.95	7.47
TPTCL (Source-JPL)	35.07	3.25%	3.33%	32.80	0.00	23.26	23.26	0.003	0.98	0.98	24.24	7.39
TPTCL (Source-PPGCL)	13.65	0.00%	3.33%	13.20	0.00	6.35	6.35	0.000	0.37	0.37	6.72	5.09
PTC (Source-Singroli Bhatwari HEP)	2.25	3.53%	3.33%	2.10	0.00	1.07	1.07	0.002	0.06	0.06	1.13	5.41
PTC (Source-JPL, Chhattisgarh)	17.89	3.48%	3.33%	16.69	0.00	6.96	6.96	0.004	0.47	0.47	7.43	4.45
APPCPL (Source-Semcorp Energy)	10.17	3.47%	3.33%	9.49	0.00	5.05	5.05	0.008	0.27	0.28	5.33	5.61
Power Purchase from Exchange	599.28	3.46%	3.33%	559.30	0.00	333.09	333.09	0.012	14.54	14.55	347.65	6.22
Total	**726.75**			**678.88**	-	**408.03**	**408.03**	**0.034**	**17.91**	**17.95**	**425.97**	**6.27**

4.5.131 The Commission vide its order dated October 25, 2021 in Petition No. 1778 of 2021 approved power procurement from short term sources i.e., M/s APPCPL (HSPPL), M/s APPCPL (SEMCORP) and M/s TPTCL (JPL). The tariff approved by the Commission for the approved sources are as follows:

TABLE 4-74: COMMISSION'S APPORVAL VIDE ORDER DATED OCTOBER 25, 2021 IN PETITION NO. 1778 OF 2021

Sl. No.	Bidder Name (Source)	Period	Duration (hrs)	Quantum (MW)	Rate Ex-bus (Rs./kWh)	PPA dated
1	APPCPL (HSPPL)			50	6.89	

Sl. No.	Bidder Name (Source)	Period	Duration (hrs)	Quantum (MW)	Rate Ex-bus (Rs./kWh)	PPA dated
2	APPCPL (SEMCORP)	October 11, 2021 to October 31, 2021	00:00-24:00	50	6.89	October 05, 2021
3	TPTCL (JPL)			60	6.90	
1	APPCPL (HSPPL)	November 01, 2021 to November 09, 2021	00:00-24:00	50	6.39	October 05, 2021
2	TPTCL (JPL)			50	6.40	
3	APPCPL (SEMCORP)			35	6.77	

4.5.132 Further, the Commission vide Order dated February, 02, 2022 in Petition No. 1795 of 2021 approved power procurement from short term sources such as M/s TPTCL (Source- PPGCL), PTC (Source- Singroli Bhatwari HEP), PTC (Source- JPL, Chhattisgarh) and APPCPL (Source- Semcorp Energy). The relevant is shown below:

Quote

18. The Commission, in view of above, adopts the following tariff and approves corresponding periods PPAs dated 19.11.2021:

Day Power Slot (09:00-18:00 Hrs):

Sl. No.	*Period*	*Bidder Name (Source)*	*Quantum (MW)*	*Rate Ex-bus (Rs./kWh)*
1	*01.02.2022 to 28.02.2022 (excluding Sundays)*	*M/s PTC India Limited (Jindal Power Limited, Chhattisgarh)*	*50*	*3.97*
2		*M/s Tata Power Trading Company Limited (Prayagraj Power Generation Company Limited, Uttar Pradesh)*	*5*	*3.98*
3	*01.03.2022 to 31.03.2022 (excluding Sundays)*	*M/s PTC India Limited (Jindal Power Limited, Chhattisgarh)*	*50*	*3.97*
4		*M/s Tata Power Trading Company Limited (Prayagraj Power Generation Company Limited, Uttar Pradesh)*	*15*	*3.98*

Peak Power Slot (18:00-24:00 Hrs):

Sl. No.	*Period*	*Bidder Name (Source)*	*Quantum (MW)*	*Rate Ex-bus (Rs./kWh)*
1	*01.02.2022 to 28.02.2022 (excluding Sundays)*	*M/s Tata Power Trading Company Limited (Prayagraj Power Generation Company Limited, Uttar Pradesh)*	*50*	*4.86*
2		*M/s PTC India Limited (Singroli Bhatwari HEP, Uttarakhand)*	*25*	*4.86*
3		*M/s Arunachal Pradesh Power Corporation Private Limited (Sembcorp Energy India Limited, Andhra Pradesh)*	*20*	*4.90*

Sl. No.	Period	Bidder Name (Source)	Quantum (MW)	Rate Ex-bus (Rs./kWh)
4	*01.03.2022 to 31.03.2022 (excluding Sundays)*	*M/s Tata Power Trading Company Limited (Prayagraj Power Generation Company Limited, Uttar Pradesh)*	*50*	*5.09*
5		*M/s Arunachal Pradesh Power Corporation Private Limited (Sembcorp Energy India Limited, Andhra Pradesh)*	*55*	*5.10*

Unquote

4.5.133 The Commission observed that in Power Purchase from M/s APPCPL (Source: Semcorp) for FY 0221-22, Quantum on which Energy Charges are computed are less that quantum on which Open Access Charges/ Transmission Charges computed. The Commission sought justification/ reconciliation for the same. In reply, the Petitioner submitted the reconciliation of Energy procured and Transmission Charges as shown in table below:

TABLE 4-75: SUMMARY OF SHORT TERM POWER PROCURED VS SCHEDULES FROM APPCPL (SEMBCORP) DURING OCT-NOV'21

Invoice No.	Invoice Date	MU	Rate	Energy Cost
Energy Bills Summary				
AP/EB/21-22/1106	16-Oct-21	1.20	6.89	0.83
AP/EB/21-22/1119	25-Oct-21	9.38	6.89	6.46
AP/EB/21-22/1139	01-Nov-21	7.20	6.89	4.96
AP/EB/21-22/1143	09-Nov-21	5.64	6.77	3.82
AP/EB/21-22/1149	16-Nov-21	0.84	6.77	0.57
Energy Bills Total		**24.26**	6.86	**16.63**
Less: Rebate		**0.00**	0.00	**-0.33**
Net Energy Cost		**24.26**	**6.72**	**16.30**
Energy Scheduling Summary				
AP/OA/21-22/1169	19-Oct-21	20.40		
AP/OA/21-22/1204	16-Nov-21	6.48		
AP/CN/21-22/175	13-Dec-21	-2.40		
AP/DN/21-22/073	13-Dec-21	0.00		
Scheduled Power		**24.48**		

Invoice No.	Invoice Date	MU	Rate	Energy Cost
Variance		**0.22**		
Variance of 0.22MU is due to force majure outage on 20th Oct'21				

TABLE 4-76: SUMMARY OF ST POWER PROCURED VS SCHEDULES FROM APPCPL (SEMBCORP) DURING FEB-MAR'22

Invoice No.	Invoice Date	MU	Rate	Energy Cost
Energy Bills Summary				
AP/EB/21-22/1449	16-Feb-22	0.48	4.90	0.24
AP/EB/21-22/1473	24-Feb-22	0.84	4.90	0.41
AP/EB/21-22/1496	02-Mar-22	0.48	4.90	0.24
AP/EB/21-22/1501	09-Mar-22	2.31	5.10	1.18
AP/EB/21-22/1510	16-Mar-22	1.98	5.10	1.01
AP/EB/21-22/1517	24-Mar-22	1.77	5.10	0.90
AP/EB/22-23/0001	01-Apr-22	2.31	5.10	1.18
Energy Bills Total		**10.17**		**5.15**
Less: Rebate		0.00	0.00	-0.10
Net Energy Cost		**10.17**	**4.96**	**5.05**
Energy Scheduling Summary				
AP/OA/21-22/1524	01-Apr-22	1.80		
AP/OA/21-22/1543	26-Feb-22	8.91		
Scheduled Power		**10.71**		
Variance		**0.54**		
Credit Note No. AP/CN/22-23/003 w.r.t. 0.54 MU received in FY 2022-23 to be adjusted in True-up for FY 2022-23.				

4.5.134 With regard to power purchase from exchange, the Commission vide Deficiency Note sought details of power purchase from exchange for FY 2021-22. In reply, the Petitioner has submitted that during April 2021 to March 2022, the Company has purchased power from Exchange at NR periphery and submitted the slot wise summary as shown in table below:

TABLE 4-77: DETAILS OF POWER PURCHASE FROM EXCHANGE SUBMITTED BY THE PETITIONER FOR FY 2021-22

Time Slot	Energy Purchase Ex-Bus NR (MUs)	Rate Rs./kWh	Amount Rs. Crore
Night (23-24, 00-06Hrs)	155.83	5.29	82.36
Morning (06-10 Hrs)	78.41	6.05	47.43
Day (10-17 Hrs)	185.09	4.54	84.02
Evening (17-23 Hrs	179.94	6.63	119.28
Total at NR (00-24 Hrs)	**599.28**	**5.56**	**333.09**
Transmission Losses and Charges	(39.98)	0.00	14.55
Landed at NPCL	**559.30**	**6.22**	**347.65**

4.5.135 Further, the Commission observed that the Petitioner includes trading margin of IEX and an additional trading margin of M/s APPCPL. The Commission is of the view that the Petitioner as a Distribution Licensee can purchase power directly from the exchange. Hence, the Commission is disallowing the M/s APPCPL's Trading Margin and GST thereon.

4.5.136 After approving the above source, the remaining energy requirement is assumed to be procured from power exchange based on the rate approved by the Commission for power purchase through exchange (thermal). The Inter-State and Intra-State transmission charge is approved in proportion to the actual value of power procured through power exchange.

4.5.137 The Commission has considered the RTC rate of FY 2021-22 as available in the website of IEX as tabulated below:

IEX INDIAN ENERGY EXCHANGE

Prices at IEX (INR/MWh)
Yearly prices are simple average of non-zero prices in (No of days in an year*24*4) no of 15 minutes time block of respective year.

Financial Year: 2021-22

Financial Year	N2
2021 - 2022	4398.12

Summary	N2
RTC	4398.12
Evening	5778.03
Day	3597.09
Night	3857.76
Morning	4675.72

https://www.iexindia.com/marketdata/areaprice.aspx

4.5.138 Based on the above, the power purchase cost of the Petitioner from short-term sources is approved for FY 2021-22 is as shown in the Table below:

TABLE 4-78: POWER PROCUREMENT FOR SHORT TERM APPROVED BY THE COMMISSION FOR FY 2021-22

Source	MU at Ex-bus	Inter State Loss (%)	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (in Rs. Cr)	Energy Charges (in Rs. Cr)	Amount (in Rs. Cr)	PGCIL Charges (Rs. Cr)	UPPTCL charges (Rs. Cr)	Total Transmission (Rs. Cr)	Total (in Rs. Cr)	Per Unit Cost
APPCPL (Source-HSPPL)	24.18	3.25%	3.33%	22.62	0.00	15.93	15.93	0.00	0.59	0.59	16.52	7.30
APPCPL (Source-SEMCORP)	24.26	3.26%	3.33%	22.68	0.00	16.30	16.30	0.00	0.63	0.63	16.93	7.46
TPTCL (Source-JPL)	35.07	3.25%	3.33%	32.80	0.00	23.26	23.26	0.00	0.98	0.98	24.24	7.39
TPTCL (Source-PPGCL)	13.65	0.00%	3.33%	13.20	0.00	6.35	6.35	0.00	0.10	0.10	6.45	4.89
PTC (Source-Singroli Bhatwari HEP)	2.25	3.53%	3.33%	2.10	0.00	1.07	1.07	0.00	0.06	0.06	1.13	5.41
PTC (Source- JPL, Chhattisgarh)	17.89	3.48%	3.33%	16.69	0.00	6.96	6.96	0.00	0.47	0.47	7.43	4.45
APPCPL (Source-Semcorp Energy)	10.17	3.47%	3.33%	9.49	0.00	5.05	5.05	0.00	0.28	0.28	5.33	5.61
Power Purchase from Exchange	599.28	3.46%	3.33%	559.30	0.00	331.95	331.95	0.00	14.54	14.54	346.49	6.20
Deemed Power Purchase from Exchange	49.33	3.46%	3.33%	46.04	0.00	21.70	21.70	0.00	1.20	1.20	22.89	4.97
Total	**776.08**			**724.92**		**428.57**	**428.57**	**0.00**	**18.85**	**18.85**	**447.42**	**6.17**

4.5.139 It is observed that the quantum of power submitted by the Petitioner is lower in comparison to the approved /tied up Quantum (MW) from Generating Sources. The Petitioner is directed to ensure that Generating Sources supply the minimum quantum as per its obligation in accordance **to their respective PPA / Contracts and the Petitioner should maximise its off-take to minimize its power procurement cost. Further, in case minimum obligation as per PPA's / Contracts is not achieved, the settlements need to be done as per the provisions of PPA's / Agreements / Contracts with the Generators / Traders and the Petitioner is required to provide the detail of the same along with Tariff Petition.**

Unscheduled Interchange:

4.5.140 It has been observed that NPCL has purchased 41.21 MU from DSM for FY 2021-22 in spite of the directions of the Commission given in previous Tariff Order to limit its UI and indulge in Real Time Markets. The Petitioner submitted that total drawl under DSM mechanism is 41.21 MU (Net) which is 1.5% of the power purchase quantum and 2% of power purchase cost. The Petitioner further submitted that the Company has purchased power from real-time market as well, however, at times it is not possible to accurately estimate the exact power requirement as the demand is highly volatile, uncertain and dependent on a number of factors which are beyond control as explained here-in-below:

Quote

a) Uncertain Demand: In our Petition no. 1919 of 2022, we once again submit that it is highly uncertain or in-fact not feasible to exactly estimate, even on day-ahead basis, the power requirement in exact quantum as the demand is highly volatile, uncertain and dependent on a number of factors which are beyond the control of the Company e.g. sudden outages of Generating or Distribution systems, volatile weather conditions, long intermittent holidays on account of various festivals, Govt. holidays etc. There can be certain time-blocks wherein the power tied-up may remain insufficient to meet the demand / excess as compared to load drawn and hence, unutilised which is being settled under DSM mechanism. Due to the above uncertainty, the Central Commission has notified DSM Regulations for the accounting of such deviations. Even, the MYT Regulations 2019 duly acknowledges the power drawl under DSM mechanism and allows variations upto 10% of the total power procurement.

Further, in accordance with the above-mentioned regulations, both underdrawal and over-drawal of power need to be governed for meeting the mandatory sign change requirement as per DSM Regulations of Central Commission. As per DSM Regulations of Central Commission, the Company is required to change its sign of drawal after every 6 time-blocks or by remaining in the range of +/- 20 MW with reference to its schedule to avoid sign change charges.

b) Increase in Demand volatility due to RE Power: Further, it is pertinent to mention here that the Company has tied up 90 MW power from Renewable Sources viz. 32 MW from Wind and 58 MW from Solar apart from almost 24 MW from Roof-top Solar connections. Also, the Company has already granted Open Access for 32 MW capacity who are sourcing power from Solar Sources and many more consumers are in the process of arranging cheaper power from renewable sources. All this has further aggravated the uncertainty in the actual flow of power vis-à-vis scheduled power resulting into increased volume of such variations being settled under DSM mechanism.

c) Procurement through RTM: As directed by the Hon'ble Commission, the Company has taken various initiatives including participation in Real-time IEX platform which started its operations w.e.f. 01.06.2020. The Company has procured from RTM of IEX which is being included under total procurement from IEX in Form no. F-13M(i). In this regard, it is pertinent to mention that scheduling of power from IEX-RTM ideally takes 1.15 Hrs from the time of bidding apart from another 15-30 minutes for planning and bid formulation etc. For example, if a bid is placed at 22:45 Hrs. for purchase of power it will get dispatched from 00:30 Hrs. For such period before commencement of scheduling, the Company has no other option but to avail power from DSM to manage its distribution system. Further, adequate power in the RTM market is also not available many times for various reason e.g. lack of sufficient seller, IT/ technical reasons on IEX Platform etc. leading to variation in schedule vis-à-vis actual drawal.

Unquote

4.5.141 The Commission observed that the Petitioner not submitted any documentary evidence for DSM charges and directed to submit the documentary evidence along with summary details of the bills, and the respective amounts. In reply, the Petitioner submitted that the Company reconciles the DSM with data published by NRLDC from time to time. Accordingly, the Company finalises its statutory accounts based on the energy Implementation Schedule being published by NRLDC which is further reduced by the intra-state transmission losses as approved by the Commission from time to time to arrive at energy delivered at NPCL Periphery. The aforesaid Statement is duly verified by the Statutory Auditors of the Company.

4.5.142 Further, the Petitioner submitted that UPSLDC revised the energy accounting statements for the period from FY 2015-16 to FY 2020-21 more than 40 times which included revisions for multiple weeks of preceding periods and still the same is not in sync with the data published by NRLDC. Therefore, the Petitioner relied on the data published by NRLDC for accounting of DSM. The data published by NRLDC are available in public domain on www.nrldc.in.

4.5.143 The Commission has gone through the Petitioner's submissions regarding the claim of UI/DSM charges. Despite repeated directions to not indulge in UI, the Petitioner has again indulged in UI during FY 2021-22 and it is observed that the same has increased with respect to earlier order. Due to non-compliance of the Commission's directions, the Commission does not approve the claim of UI charges for FY 2021-22. Further, it is reiterated to limit its UI and indulge in real time market.

4.5.144 The Petitioner submitted that the Commission vide Order dated June 29, 2021 in Petition No. 1656 of 2020 has trued up the ARR of UPPTCL for FY 2019-20 and subsequently the Petitioner raised the bill towards arrear. The Commission after prudence check of the bill raised by the UPPTCL towards arrear of True Up for FY2019-20 approves the arrear amount as claimed by the Petitioner.

4.5.145 Accordingly, the Commission has approved the Power purchase cost and corresponding transmission charges as discussed in the source wise sections above. The Total power purchase approved for FY 2021-22 is shown in the Table below:

TABLE 4-79: POWER PURCHASE COST AND QUANTUM APPROVED BY THE COMMISSION FOR FY 2021-22 (Rs. Crore)

Particulars	Claimed in Petition for FY 2021-22						Approved Upon Truing Up for FY 2021-22					
Sources of Power Purchase	Energy (MU) at NPCL bus	Avg. cost (Rs. /kWh)	Cost excluding Transmission (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL Charges (Rs. Crore)	Total Cost (Rs. Crore)	Energy (MU) at NPCL bus	Avg. cost (Rs. /kWh)	Cost excluding Transmission (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL Charges (Rs. Crore)	Total Cost (Rs. Crore)
Long Term Power												
Dhariwal Infrastructure limited (DIL)	1,157.35	5.29	612.31	69.85	27.98	710.15	1,157.35	4.59	531.24	69.85	27.98	629.08

Particulars	Claimed in Petition for FY 2021-22						Approved Upon Truing Up for FY 2021-22					
Sources of Power Purchase	**Energy (MU) at NPCL bus**	**Avg. cost (Rs. /kWh)**	**Cost excluding Transmission (Rs. Crore)**	**PGCIL Charges (Rs. Crore)**	**UPPTCL Charges (Rs. Crore)**	**Total Cost (Rs. Crore)**	**Energy (MU) at NPCL bus**	**Avg. cost (Rs. /kWh)**	**Cost excluding Transmission (Rs. Crore)**	**PGCIL Charges (Rs. Crore)**	**UPPTCL Charges (Rs. Crore)**	**Total Cost (Rs. Crore)**
Change in Law and Additional Coal Charges			(1.91)			(1.91)			-			-
Arrears claimed for FY17 to FY19 incl. Carrying Cost			155.07			155.07			155.07			155.07
Subtotal	**1,157.35**	**6.61**	**765.47**	**69.85**	**27.98**	**863.31**	**1,157.35**	**5.93**	**686.31**	**69.85**	**27.98**	**784.14**
Medium Term Power												
APPCPL- Govt. of AP	192.56	4.54	87.40	5.28	4.81	97.50	192.56	4.39	84.48	5.28	4.81	94.57
APPCPL- Govt. of Nagaland	99.45	4.58	45.52	0.06	2.61	48.20	99.45	4.37	43.42	0.06	2.61	46.09
APPCPL- Goodwill, HP	33.22	3.60	11.96	0.01	0.90	12.87	33.22	3.50	11.64	0.01	0.90	12.55
TPTCL- Govt of Himachal Pradesh	109.55	3.47	38.00	0.01	2.88	40.90	109.55	3.39	37.14	0.01	2.88	40.03
Subtotal	**434.78**	**4.21**	**182.89**	**5.37**	**11.20**	**199.46**	**434.78**	**4.06**	**176.67**	**5.37**	**11.20**	**193.25**
Short Term Power												
APPCPL (HSPPL)	22.62	7.04	15.93	0.00	0.59	16.52	22.62	7.04	15.93	-	0.59	16.52
APPCPL (SEMCORP)	22.68	7.19	16.30	0.00	0.64	16.95	22.68	7.19	16.30	-	0.63	16.93
TPTCL (JPL)	32.80	7.09	23.26	0.00	0.98	24.24	32.80	7.09	23.26	-	0.98	24.24
TPTCL (PPGCL)	13.20	4.82	6.35	-	0.37	6.72	13.20	4.82	6.35	-	0.10	6.45
PTC (Singroli Bhatwari HEP)	2.10	5.11	1.07	0.00	0.06	1.13	2.10	5.11	1.07	-	0.06	1.13
PTC (JPL, Chhattisgarh)	16.69	4.17	6.96	0.00	0.47	7.43	16.69	4.17	6.96	-	0.47	7.43
APPCPL (Semcorp Energy)	9.49	5.32	5.05	0.01	0.27	5.33	9.49	5.32	5.05	-	0.28	5.33
Power Purchase from Exchange	559.30	5.96	333.09	0.01	14.54	347.65	559.30	5.94	331.95	-	14.54	346.49
Deemed Power Purchase from Exchange	-	-	-	-	-	-	46.04	4.71	21.70	-	1.20	22.89
Subtotal	**678.88**	**6.01**	**408.03**	**0.03**	**17.91**	**425.97**	**724.92**	**5.91**	**428.57**	**-**	**18.85**	**447.42**
Renewable Power												
Solar Power (GNIDA)	1.22	6.92	0.84	-	-	0.84	1.22	6.92	0.84	-	-	0.84
Solar Power (APPCPL)	0.41	5.13	0.21	-	-	0.21	0.41	3.85	0.16	-	-	0.16
Solar Power (Adani)	51.81	3.12	16.18	-	0.62	16.81	51.39	3.12	16.05	-	0.62	16.67
Solar Power (Tata)	4.64	3.12	1.45	-	0.06	1.50	4.64	3.12	1.45	-	0.06	1.50

Particulars	Claimed in Petition for FY 2021-22						Approved Upon Truing Up for FY 2021-22					
Sources of Power Purchase	**Energy (MU) at NPCL bus**	**Avg. cost (Rs. /kWh)**	**Cost excluding Transmission (Rs. Crore)**	**PGCIL Charges (Rs. Crore)**	**UPPTCL Charges (Rs. Crore)**	**Total Cost (Rs. Crore)**	**Energy (MU) at NPCL bus**	**Avg. cost (Rs. /kWh)**	**Cost excluding Transmission (Rs. Crore)**	**PGCIL Charges (Rs. Crore)**	**UPPTCL Charges (Rs. Crore)**	**Total Cost (Rs. Crore)**
Solar Power (Net Metering)	9.13	7.85	7.16	-	-	7.16	0.51	2.00	0.10	-	-	0.10
Wind Power (PTC)	32.04	3.58	11.47	-	0.77	12.24	32.04	3.58	11.47	-	0.77	12.24
Non-Solar (Exchange-RE)	73.93	5.18	38.26	0.03	2.03	40.33	73.93	5.15	38.08	-	2.07	40.15
APPCPL- (DoP, GoAP)	6.44	4.65	3.00	0.01	0.19	3.20	6.44	4.65	3.00	-	0.20	3.20
APPCPL- (DoP, Nagaland)	6.24	4.51	2.81	0.03	0.18	3.02	6.24	4.51	2.81	-	0.21	3.02
APPCPL- (MePDCL, Meghalaya)	26.74	4.57	12.21	0.03	0.71	12.95	26.74	4.57	12.21	-	0.74	12.95
KREATE- (E&PD, Govt of Sikkim)	15.23	4.57	6.96	0.01	0.41	7.39	15.23	4.57	6.96	-	0.42	7.39
Subtotal	**227.83**	**4.41**	**100.56**	**0.12**	**4.98**	**105.65**	**218.79**	**4.26**	**93.13**	**-**	**5.09**	**98.22**
Power Purchaser Cost (Excl. Trans Charges)			**1,456.95**						**1,384.69**			
Total Transmission Charges												
UPPTCL True-up Arrear (FY 2019-20) as per UPPTCL TO dated 29.06.2021	-		12.82						12.82			
UI/ DSM/Sale of Power	41.21		28.11						-			
Transmission Charges of PGCIL			75.35						75.22			
Transmission Charges of UPPTCL			62.10						62.88			
Total Power Purchase Cost	**2,540.05**	**6.44**	**1,635.32**				**2,535.84**	**6.06**	**1,535.85**			

4.5.146 Further, as discussed in the sales section, the Petitioner have overbooked the sales under the unmetered categories (LMV-5) of the consumers against the norms approved for those categories. The same has been disallowed and the corresponding excess power purchase cost claimed by the Petitioner is also being disallowed as depicted below:

TABLE 4-80: DISALLOWANCE IN PPC FOR FY 2021-22 (Rs. Crore)

S. NO.	Particulars	Approved Upon Truing Up
1	Excess Sales booked under unmetered categories (MU)	0.92
2	Distribution Loss (%)	7.80%
3	Excess energy at Discom periphery (MU)	1.00
5	Rate considered of short-Term power purchase at NPCL Bus (Rs/kWh)	6.20
6	**Disallowance in PPC due to excess sales booking in unmetered categories (Rs. Crore)**	**0.62**

TABLE 4-81: NET POWER PURCHASE COST AS APPROVED BY THE COMMISSION FOR FY 2021-22

Particular	Power Purchase Cost (Rs. Crore)
Total Power Purchase Cost	1535.88
Less: Adjustment of Extra Sales	0.62
Net Power Purchase Cost	**1535.26**

4.6 O&M EXPENSES

Petitioner's Submission

4.6.1 The Petitioner submitted that the Operation and Maintenance (O&M) expenses comprises of Employee related costs, Administrative and General (A&G) Expenses, and Repair and Maintenance (R&M) expenditure.

4.6.2 The Petitioner has also submitted that the Regulation 45 of the MYT Regulations 2019 deals with the O&M Expenses which is reproduced below:

Quote

45. Operation & Maintenance Expenses

a) The Operation and Maintenance expenses for the Distribution Business shall be computed as stipulated in with these Regulations.

b) The Operation and Maintenance expenses shall be derived on the basis of the average of the Trued-Up values (without efficiency gain / loss) for the last five (5) financial years ending March 31, 2019 subject to prudence check by the

Commission. However, if Trued-Up values (without efficiency gain / loss) are not available for FY 2018-19, then last five (5) available Trued-Up values (without efficiency gain / loss) will be considered and subsequently when the same are available the base year value (i.e. FY 2019-20) will be recomputed.

c) *The average of such operation and maintenance expenses shall be considered as Operation and Maintenance expenses for the middle year and shall be escalated year on year with the escalation factor considering CPI and WPI of respective years in the ratio of 60:40, for subsequent years up to FY 2019-20.*

d) *The One-time expenses such as expense due to change in accounting policy, arrears paid due to Pay Commissions, etc., and the expenses beyond the control of the Distribution Licensee such as dearness allowance, terminal benefits, etc., in Employee cost, shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check.*

e) *At the time of Truing-up of the O&M expenses, the actual point to point inflation over Wholesale Price Index numbers as per Office of Economic Advisor of Government of India and the actual Consumer Price Index for Industrial Workers (all India) as per Labour Bureau, Government of India, in the concerned year shall be considered.*

45.1 Employee Cost

Employee cost shall be computed as per the following formula escalated by consumer price index (CPI), adjusted by provisions for expenses beyond the control of the Licensee and one-time expected expenses, such as recovery / adjustment of terminal benefits, implications of Pay Commission, arrears, Interim Relief, etc.:

$EMP_n = EMP_{n-1} \times (1 + \text{CPI inflation})$

Where:

EMP_n: Employee expense for the n^{th} year;

EMP_{n-1}: Employee expense for the $(n-1)^{th}$ year;

CPI inflation is the average of Consumer Price Index (CPI) for immediately preceding three Financial Years.

45.2 Repairs and Maintenance Expense

Repairs and Maintenance expense shall be calculated by following formula:

$R\&M_n = R\&M_{n-1}$ *(1+ WPI inflation)*

Where:

$R\&M_n$: *Repairs & Maintenance expense for the nth year;*

$R\&M_{n-1}$: *Repairs & Maintenance expense for the (n-1)th year;*

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years.

45.3 Administrative and General Expense

A&G expense shall be computed as per the following formula escalated by wholesale price index (WPI) and adjusted by provisions for confirmed initiatives (IT etc. initiatives as proposed by the Distribution Licensee and validated by the Commission) or other expected one-time expenses:

$A\&G_n = A\&G_{n-1}$ *(1+ WPI inflation)*

Where:

$A\&G_n$: *A&G expense for the* n^{th} *year;*

$A\&G_{n-1}$: *A&G expense for the* $(n-1)^{th}$ *year;*

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years:

Provided that Interest and Finance charges such as Credit Rating charges, collection facilitation charges, financing cost of Delayed Payment Surcharge and other finance charges shall be a part of A&G expenses.

Illustration: For FY 2020-21, $(n-1)^{th}$ *year will be FY 2019-20 which is also the base year*

Unquote

4.6.3 The Petitioner submitted that the Commission that while approving the O&M

Expenses in ARR for FY 2021-22 in its Tariff Order dated August 26, 2021 has computed the normative O&M expenses based on the Trued-Up O&M expenses of FY 2015-16 to FY 2019-20 and has done some inadvertent arithmetical errors while computing normative O&M Expenses for this control period which are as follows:

i) **Error in computation of Employee Expenses for FY 2021-22:** Based on net trued-up employee expenses for FY 2015-16 & FY 2016-17 i.e. after deduction of employee expenses capitalized instead of gross trued-up employee expenses;

ii) **Error in computation of A&G Expenses for FY 2021-22**: Based on trued-up expenses for FY 2015-16 to FY 2019-20 without considering the following:

(a) Expenses incurred for compliance of directives of the State Commission,
(b) Impact of Service Tax
(c) Impact of Goods & Service Tax and
(d) Cost of Borrowing of DPS

4.6.4 The Petitioner has further submitted that the O&M Expenses upto FY 2016-17 were trued-up by the Commission in accordance with UPERC Distribution Tariff Regulation 2006. As per Regulation 4.3 of the Distribution Tariff Regulations 2006, the methodology for computation of normative O&M expense was as follows:

Quote

4.3 Operation & Maintenance Expenses (O&M):

1. The O&M expenses comprise of employee cost, repairs & maintenance (R&M) cost and administrative & general (A&G) cost. The O&M expenses for the base year shall be calculated on the basis of historical / audited costs and past trend during the preceding five years.

However, any abnormal variation during the preceding five years shall be excluded. For determination of the O&M expenses of the year under consideration, the O&M expenses of the base year shall be escalated at inflation rates notified by the Central Government for different years. The inflation rate for above purpose shall be the weighted average of Wholesale Price Index and Consumer Price Index in the ratio of 60:40. Base year, for these regulations means, the first year of tariff determination under these regulations.

2. Where such data for the preceding five years is not available the Commission may fix O&M expenses for the base year as certain percentage of the capital cost.

3. Incremental O&M expenses for the ensuing financial year shall be 2.5% of capital addition during the current year. O&M charges for the ensuing financial year shall be sum of incremental O&M expenses so worked out and O&M charges of current year escalated on the basis of predetermined indices as indicated in regulation 4.3 (1).

4. The O&M expenses shall be brought to an efficient level i.e. in equivalence with similarly placed efficient utilities. The Commission may fix norms based on the circuit kilometers of distribution lines and number of bays in substation and such other parameters, as may be determined by the Commission in due course of time.

5. The Commission may consider additional O&M expenses on account of war, insurgency, and change in laws or like eventualities for a specified period.

Unquote

4.6.5 The Petitioner also submitted that as per the above-mentioned MYT Regulations, 2006, the Commission were computing the O&M expenses in consolidated manner without bifurcating the same into A&G, R&M and Employee cost. Accordingly, the O&M expense in consolidated manner were approved by the Commission for FY 2015-16 and FY 2016-17.

4.6.6 The Petitioner further submitted that for the purpose of computation of normative R&M Expenses, A&G Expenses and Employee expenses for the MYT Period FY 2020-21 to FY 2024-25, the Commission bifurcated the consolidated O&M expenses for FY 2015-16 & FY 2016-17 in proportion to trued-up R&M Expenses, A&G Expenses and Employee expenses for FY 2017-18.

4.6.7 The Petitioner submitted that the Commission vide Tariff Order dated November 30, 2017, trued up the O&M Expenses of Rs. 45.20 Crore for FY 2015-16 which was net of Employee Cost Capitalization of Rs. 6.90 Crore Accordingly, the Gross O&M Expenses trued-up for FY 2015-16 was Rs.52.10 Crore

4.6.8 The Petitioner further submitted that the Commission, vide Tariff Order dated January 22, 2019 trued up the O&M Expenses of Rs. 51.44 Crore for FY 2016-17 which was net of Employee Cost Capitalization of Rs. 12.32 Crore. Accordingly, the

Gross O&M Expenses trued-up for FY 2016-17 was Rs. 63.76 Crore.

4.6.9 The Petitioner also submitted that the Commission vide Tariff Order dated September 03, 2019 trued up the O&M Expenses Rs. 66.36 Crore for FY 2017-18 which was net of Employee Cost Capitalization Rs. 10.34 Crore, accordingly the Gross O&M Expenses trued-up for FY 2017-18 was Rs. 76.70 Crore. The same gross Employee Cost was considered by the Commission for FY 2017-18 for computation of normative Employee Cost. Further, gross Employee Cost was also considered by the Commission for FY 2018-19 and FY 2019-20.

4.6.10 However, while calculating the proportionate components of A&G Exp., R&M Exp. and Employee Exp. for FY 2015-16 and 2016-17, the Commission, erroneously considered net Trued-up O&M expense of Rs.45.20 Crore and Rs.51.44 Crore in FY 2015-16 and FY 2016-17 respectively (after deduction of Employee Cost Capitalized) instead of gross trued-up O&M Expenses of Rs.52.10 Crore (FY 2015-16) and Rs.63.76 Crore (FY 2016-17). Details of computation done by the Commission is given below Table:

TABLE 4-82: COMPUTATION OF O&M EXPENSES AS PER TARIFF ORDER DATED AUGUST 26, 2021 (Rs. Crore)

Particulars	FY 16	FY 17	FY 18	FY 19	FY 20	Avg FY 18	Indices for FY 19 (%)	FY 19	Indices for FY 20 (%)	FY 20	Indices for FY 21 (%)	FY 21	Indices for FY 21 (%)	FY 22
Emp Exp.	15.5	17.7	26.4	29.6	35.9	25.03	5.2	26.3	6.3	28	5.35	29.5	6	31.25
R&M Exp.	22.9	26	38.8	39.9	38.6	33.22	5.2	35	6.3	37.2	2.96	38.3	2.37	39.16
A&G Exp.	6.8	7.74	11.5	12.3	13.4	10.37	5.2	10.9	6.3	11.6	2.96	10.8	2.37	12.22
O&M Excl. Fin. Chg.	**45.2**	**51.4**	**76.7**	**81.8**	**87.9**	**68.62**		**72.2**		**76.7**		**78.6**		**82.63**
Fin. Chg.	3.07	1.71	1.64	1.58	1.74	1.95	5.2	2.05	6.3	2.18	2.96	2.24	2.37	2.29
Gross O&M	**48.3**	**53.2**	**78.3**	**83.4**	**89.7**	**70.57**		**74.2**		**78.9**		**80.8**		**84.93**

4.6.11 The Petitioner submitted that in view of the above, the Employee Expenses capitalized by the Petitioner is necessarily required to be deducted from the Gross Employee Expenses to arrive at the Net Employee Expenses after determination of normative employee expense, therefore, Gross Employee Expenses need to be considered while computing the normative Employee Expenses.

4.6.12 Further, the Petitioner submitted that Regulation 45 of MYT Regulation, 2019 provides that the Operation and Maintenance expenses shall be derived on the basis of the average of the Trued-Up values (without efficiency gain / loss) for the last five (5) financial years ending March 31, 2019 subject to prudence check by the Commission. The Petitioner submitted that the Commission in addition to the normative O&M Expenses, determined as per Distribution Tariff Regulation, 2006 and MYT Regulation, 2014, had also allowed additional O&M expenses incurred by the Company on the following heads which are not included in Normative O&M Expenses as enumerated below:

a) Expenses incurred for compliance of directives of the State Commission,
b) Impact of Service Tax till FY 2016-17 and
c) Impact of Goods & Service Tax (GST) in FY 2017-18.
d) Cost of Borrowing of DPS

4.6.13 The Petitioner submitted the details of the expenses approved by the Commission as below:

- The Commission, while Truing up ARR for FY 2015-16 *vide* the MYT Tariff Order dated November 30, 2017, approved the Expenses incurred for compliance of directives of the Commission of Rs.0.82 Crore and Impact of Service Tax of Rs.1.41 Crore separately in addition to the normative O&M Expenses. It also trued-up Cost of Borrowing for DPS of Rs.1.44 Crore for FY 2015-16 in MYT Tariff Order dated November 30, 2017.
- The Commission while Truing up the ARR for FY 2016-17 *vide* the Tariff Order dated January 22, 2019 approved the Expenses incurred for compliance of directives of Rs.1.12 Crore and Impact of Service Tax of Rs.2.05 Crore separately in addition to the normative O&M Expenses. The Commission also trued-up Cost of Borrowing for DPS of Rs.3.02 Crore for FY 2016-17 in Tariff Order dated January 22, 2019.
- The Commission, while Truing up the ARR for FY 2017-18 *vide* Tariff Order dated September 03, 2019, approved the Impact of Goods & Service Tax of Rs.2.22 Crore separately in addition to the O&M Expenses. The Commission also trued-up Cost of Borrowing for DPS of Rs.3.33 Crore for FY 2017-18 in the Tariff Order dated September 03, 2019.

4.6.14 The Petitioner submitted that since, the Commission has approved the above-referred legitimate expenses incurred by the Company in compliance to change in law / direction of the Commission, the same need to be considered as part of the Trued-up O&M Expenses for determination of Normative O&M Expenses for Base

Year as per Regulation 45. The Petitioner submitted that the Commission while approving the O&M Expenses for FY 2021-22 vide it Tariff Order dated August 26, 2021 has inadvertently not considered the above-mentioned additional O&M expenses being trued-up but had approved the same in the preceding years.

4.6.15 Thus, the Petitioner submitted that in view of the provisions of MYT Regulations, 2019, the above stated additional O&M expenses incurred on account of compliance of directives, service tax and GST are required to be considered in determination of normative O&M Expenses for Base Year, and the petitioner has accordingly included the same in the computation of Average O&M Expenses for Base Year.

4.6.16 The Petitioner submitted that it is also pertinent to mention here that while truing up the ARR for FY 2018-19 and FY 2019-20, the Commission has not allowed the cost of borrowing for DPS vide the Tariff Orders dated December 04, 2020 and August 26, 2021. Aggrieved by this, the Petitioner has challenged the same by way of the Appeal No.98 of 2021 and the Appeal No.343 of 2021 (since remanded back vide judgement dated 24.11.2022) respectively. Therefore, for the purpose of computation of Normative O&M Expenses, the Petitioner has considered cost of borrowing for DPS for FY 2018-19 and FY 2019-20 on the basis of claims in respective True-Up Petition pending outcome of the above appeals.

4.6.17 The Petitioner further submitted, while Truing Up the ARR for FY 2018-19 and FY 2019-20, the Commission has not allowed the impact of GST vide the Tariff Orders dated December 04, 2020 and August 26, 2021. Aggrieved by this, the Petitioner has challenged both the Tariff Orders in Appeal No.98 of 2021 and the Appeal No.343 of 2021 (since remanded back vide judgement dated November 24, 2022) respectively. Hence, for the purpose of computation of normative O&M Expenses, the Petitioner has considered the impact of GST for FY 2018-19 and FY 2019-20 on the basis of its claims in respective true-up petition pending outcome of the above appeals.

4.6.18 The Petitioner has requested the Commission that the O&M Expenses should be approved after considering gross Employee Cost and expenses approved by the Commission towards (i) Expenses incurred for compliance of directives of the Commission; (ii) Impact of Service Tax; (iii) Impact of Goods & Service Tax; and (iv) Cost of Borrowing of DPS for FY 2020-21 and FY 2021-22.

4.6.19 The Petitioner based on the above discussion and methodology provided in Regulation 45 (a) to (e) of MYT Regulations 2019, has considered the average corrected trued up values of O&M Expenses including additional O&M expenses, as enumerated above, during last five (5) financial years i.e. FY 2015-16 to FY 2019-20 to determine the employee costs, A&G Expenses and R&M Expenses for the middle year i.e. FY 2017-18 and provided the same in below Table : -

TABLE 4-83: NORMATIVE O&M EXPENSES (Rs. Crore)

Sl. No	Particulars	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Average Normative (FY 17-18)
1	Emp. Exp.	18.20	22.31	26.38	29.62	35.92	**26.49**
2	R&M Exp.	26.76	32.80	38.78	43.29	48.22	**37.97**
3	A&G Exp.	7.97	9.76	11.54	12.32	13.43	**11.00**
4	**Subtotal**	**52.92**	**64.88**	**76.70**	**85.23**	**97.57**	**75.46**
5	Finance Charges	3.07	1.71	1.64	1.58	1.74	**1.95**
6	S. Tax / GST	1.41	2.05	2.22	3.56	4.01	**2.65**
7	Fin. Cost of DPS	1.44	3.02	3.33	3.28	2.85	**2.78**
8	**Subtotal**	**5.92**	**6.78**	**7.19**	**8.42**	**8.61**	**7.38**
9	**Total O&M Expenses**	**58.84**	**71.66**	**83.89**	**93.65**	**106.18**	**82.84**

4.6.20 Further, the Petitioner submitted that in line with the norms mentioned in Regulation 45 (c), the values of each component of O&M expenses arrived of the middle year (i.e. FY 2017-18) values is further escalated to determine the normative expenses till base year i.e. FY 2019-20 as shown in table below: -

TABLE 4-84: COMPUTATION OF NORMATIVE O&M EXPENSES FOR BASE YEAR (Rs. Crore)

Sl. No	Particulars	Ref.	Emp. Exp.	A&G Exp.	R&M Exp.	O&M Exp.
1	**Normative Expense (FY 17-18)**	**A**	**26.49**	**18.39**	**37.97**	**82.84**
2	Escalation Factor (FY 18-19)	B	5.20%	5.20%	5.20%	-
3	**Normative Expense (FY 18-19)**	**c=a x (1 + b)**	**27.86**	**19.35**	**39.95**	**87.15**
4	Escalation Factor (FY 19-20)	D	6.30%	6.30%	6.30%	-
5	**Normative Expense (FY 19-20)**	**e=c x (1 + d)**	**29.62**	**20.56**	**42.46**	**92.64**

4.6.21 Accordingly, the Petitioner submitted that based on the above determined normative O&M Expenses for Base Year i.e. FY 2019-20, the normative O&M Expenses for FY 2021-22 has been computed and shown below:

Normative Employee Expenses: -

Regulation 45.1 of the MYT Regulations, 2019 provides for determination of normative employee expenses, as reproduced below:

"Employee cost shall be computed as per the following formula escalated by consumer price index (CPI), adjusted by the provisions for expenses beyond the control of the licensee and one-time expected expenses, such as recovery/adjustment of terminal benefits, implications of pay commission, arrears, Interim Relief, etc.:

$$EMP_N = EMP_{N-1} \times (1+CPI\ inflation)$$

Where:

EMP_N: *Employee expense for the* n^{th} *year;*

EMP_{N-1}: *Employee expense for the* $(n-1)^{th}$ *year;*

CPI inflation is the average of the Consumer price Index (CPI) for Immediately preceding three financial years"

4.6.22 Based on above Regulation, the Petitioner submitted that the normative employee expenses for FY 2021-22 has been worked out and shown in table below: -

TABLE 4-85: EMPLOYEE EXPENSES (Rs. Crore)

Particulars	Emp. Exp. for Base Year (FY 2019-20)	CPI Inflation FY 2020-21	Emp. Exp. for FY 2020-21	CPI Inflation FY 2021-22	Emp. Exp. for FY 2021-22
	A	B	c=a x (1+b)	D	e=c x (1+d)
Normative Emp. Expense	29.62	5.35%	31.20	5.89%	33.04

Administrative & General Expenses: -

Also, the Petitioner submitted that Regulation 45.3 of MYT Regulations, 2019 provides the methodology for determination of normative A&G expenses, as shown below:

"A&G expense shall be compted as per the following formula escalated by the Wholesale Price Index (WPI) and adjusted by provisions for confirmed initiatives (IT, etc., initiatives as proposed by the Transmission Licensee and validated by the Commission) or other expected one-time expenses:

$A\&G_n$= $A\&G_{n-1}$ (1+ WPI inflation)

Where:

$A\&G_n$: A&G expense for the n^{th} year;

$A\&G_{n-1}$: A&G expense for the $(n-1)^{th}$ year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years:…..”

4.6.23 Accordingly, considering the norms as mentioned above, the Petitioner has worked normative A&G expenses for FY 2021-22 as shown in the table below:-

TABLE 4-86: A&G EXPENSES (Rs. Crore)

Particulars	A&G Exp. for Base Year (FY 2019-20)	WPI Inflation FY 2020-21	A&G Exp. for FY 2020-21	WPI Inflation FY 2021-22	A&G Exp. for FY 2021-22
	A	B	c=a x (1+b)	D	e=c x (1+d)
Normative A&G Expense	20.56	2.96%	21.17	5.32%	22.30

4.6.24 Further, the Petitioner in the Chapter 2 (Paragraph-2.1) titled as “Revenue from Sale of Electricity” has requested the Commission that if the Commission decides to include the Captive Consumption both Revenue (Rs.) and Sales (MU) as part of sales, then corresponding actual expenses in the A&G should also be allowed as the base A&G expenses did not include expenses on account of Captive Consumption due to the reason that the Commission has for the first time decided to include the same in Revenue of FY 2020-21. Accordingly, the Commission is kindly requested to approve an additional amount of Rs. 2.94 Crore on account of Captive Consumption under A&G Expenses.

Repair and Maintenance Expense

Regulation 45.2 provides the methodology for determining normative Repair and Maintenance expenses as shown below :-

“Repair and Maintenance expense shall be calculated as per the following formula:

R&M=n= $R\&M_{n-1}$ (1+ WPI inflation)

Where:

$R\&M_n$: Repairs & Maintenance expense for n^{th} year;

$R\&M_{n-1}$: Repairs & Maintenance expense for the $(n-1)^{th}$ year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years."

4.6.25 Accordingly, considering the norms as mentioned above, the normative R&M expenses for FY 2021-22 works out as shown in following table :-

TABLE 4-87: R&M EXPENSES (Rs. Crore)

Particulars	R&M Exp. for Base Year (FY 2019-20)	WPI Inflation FY 2020-21	R&M Exp. For FY 2020-21	WPI Inflation FY 2021-22	R&M Exp. for FY 2021-22
	A	b	c=a x (1+b)	D	e=c x (1+d)
Normative R&M Expense	42.46	2.96%	43.72	5.32%	46.04

4.6.26 The summary of normative O&M Expenses as computed on the basis of methodology provided in Regulation 45 of MYT Regulations, 2019 as compared to preceding years is provided in Table below: -

TABLE 4-88: SUMMARY OF O&M EXPENSES (Rs. Crore)

Sl. No.	Financial Year	Nature	Employee Expenses	A & G Expense	R&M Expense	Gross O&M Expense
As per Distribution Tariff Regulations, 2006 and MYT Regulation, 2014						
1	FY 2015-16	Trued-up	18.2	13.89	26.76	**58.84**
2	FY 2016-17	Trued-up	22.31	16.55	32.8	**71.66**
3	FY 2017-18	Trued-up	26.38	18.73	38.78	**83.89**
4	FY 2018-19	Claimed Normative	29.62	20.74	43.29	**93.65**
5	FY 2019-20	Claimed Normative	35.92	22.04	48.22	**106.18**
As per MYT Regulations, 2019						
6	FY 2017-18	Normative	26.49	18.39	37.97	**82.84**
7	FY 2018-19	Normative	27.86	19.35	39.95	**87.15**
8	FY 2019-20	Normative	29.62	20.56	42.46	**92.64**
9	FY 2020-21	Normative	31.20	21.17	43.72	**96.09**
10	FY 2021-22	Normative	33.04	22.30	46.04	**101.39**

4.6.27 The Petitioner submitted that the Commission vide Tariff Order dated August 26, 2021 has approved the O&M expenses at Rs. 74.93 Crore (net of employee cost capitalized) for FY 2021-22.

4.6.28 Also, the Petitioner submitted that from the above table it can be seen that normative O&M expenses as per MYT Regulations, 2014 for FY 2019-20 should be Rs. 106.18 Crore whereas the normative O&M expenses as per MYT Regulations, 2019 for the same year i.e. FY 2019-20 is allowed to Rs. 92.64 Crore. The Petitioner submitted that this gap will increase in subsequent years, therefore O&M Expenses as determined on the basis of norms provided in Regulation-45 of MYT Regulations, 2019 is highly insufficient, skewed as compared to MYT Regulations, 2014.

4.6.29 The Petitioner further submitted that the Commission has been pioneering in implementation of various new regulations in the State of Uttar Pradesh. Further, the Ministry of Power has also issued several rules and regulations which are to be followed by the Company. The details of some of the Regulations are as follows:

1. **Uttar Pradesh Electricity Regulatory Commission (Standard of Performance) Regulations, 2019:** The Commission issued the UPERC (Standard of Performance) Regulations, 2019 [“SOP Regulations, 2019”] which is applicable on all the distribution licensees, their franchisee and the consumers in the State of Uttar Pradesh. The Commission in these regulations have made the performance parameters more stringent and has considerably reduced time lines to resolve Consumer Complaints.

2. **Electricity (Rights of Consumers) Rules, 2020:** The Ministry of Power has introduced the Electricity (Rights of Consumers) Rules, 2020. These rules have made the Performance parameters more stringent and time lines to resolve Consumer Complaints have been reduced considerably.

3. **Directions of Ministry of Power (CEA) (Installation and Operation of Meters) (Amendment) Regulations, 2019**: Ministry of Power published the guidelines vide Notification Dated August 17, 2021, in pursuance to the provisions made in clause 4(1) (b) of the Central Electricity Authority (Installation and Operation of Meters) (Amendment) Regulations, 2019 in regard to timelines for the replacement of existing meters with smart meters with prepayment feature. The Relevant para is reproduced below:

   2. All feeders and distribution transformers (DTs) shall be provided with meters having AMR facility or covered under AMI, as per the timelines specified below:

(i) All feeders shall be metered by December, 2022.

(ii) All DTs in electrical divisions having more than 50% consumers in urban areas with AT&C losses more than 15% in financial year 2019-20, and in all other electrical divisions with AT&C losses more than 25% in financial year 2019-20, shall be metered by December, 2023.

(iii) All DTs in areas other than those mentioned in (ii) above, shall be metered by March, 2025.

(iv) DTs and HVDS transformers having capacity less than 25 kVA may be excluded from the above timelines.

4. **Directions of Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021:** Bureau of Energy Efficiency vide notification no. 18/1/bee/discom/2021 dated 6th October, 2021 has made the "The Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021". The said Regulations has defined the times lines for Feeder & DT Metering, Energy Accounting and Process of Energy Audit. The following are the key direction and timelines mentioned in the above-mentioned Regulations;

   a) Every electricity distribution company shall conduct an annual energy audit for every financial year and submit the annual energy audit report to the Bureau and respective State Designated Agency and also made available on the website of the electricity distribution company within a period of four months from the expiry of the relevant financial year

   b) Every electricity distribution company shall ensure that all feeder wise, circle wise and division wise periodic energy accounting shall be conducted by the energy manager of the electricity distribution company for each quarter of the financial year and submit the periodic energy accounting report to the Bureau and respective State Designated Agency and also made available on the website of electricity distribution company within forty-five days from the date of the periodic energy accounting.

c) The electricity distribution company shall establish an information technology enabled system to create energy accounting reports without any manual interference.

d) The electricity distribution company shall create a centralized energy accounting and audit cell comprising of:

   i) Every electricity distribution company shall designate a nodal officer, who shall be a full-time employee of the electricity distribution company in the rank of the Chief Engineer or above, for the purpose of reporting of the annual energy audit and periodic energy accounting and communicate the same to the Bureau.

   ii) a nodal officer, an energy manager and an information technology manager, having professional experience of not less than five years;

   iii) a financial manager having professional experience of not less than five years.

e) The energy accounting and audit system and software shall be developed to create monthly, quarterly and yearly energy accounting reports.

f) Every electricity distribution company shall provide the details of the information technology system in place as specified in clause (f) of regulation 5 that ensures minimal manual intervention in creating the energy accounting reports and any manual intervention of any nature, in respect of the period specified therein, shall be clearly indicated in the periodic energy accounting report.

5. **Directions of Commission for 100% Feeder Metering:** The Commission vide its tariff order dated Dec 4th, 2020 and dated August 26th, 2021 also directed the Company to ensure 100% feeder metering and DT metering with energy audit within next one year.

6. **Cyber Security related Regulations and Directions:**

a) In view of the ever-rising risks associated with cyber security for both IT (Information Technology) and OT (Operational Technology) Infrastructure, the Ministry of Power and various other government bodies have issued a series of Regulations and Directions to the Power Utilities including the Company. To comply with the aforesaid regulations and directions, the Company has to share cyber security related information/details to the respective agencies and more importantly need to upgrade its capabilities to counter the cyber security-related threats simultaneously. In this regard, following are the details of the recent Regulations / directions issued by various authorities:

i) Central Electricity Authority (CEA)

- CEA, vide CEA-CH-13-12/4/2021-IT Division dated Oct 8th, 2021, has issued "Guidelines on Cyber Security for Power Sector" to be complied by all Power Sector entities mandatorily;
- CEA has also directed all Power Sector entities to create, maintain and regularly practice (through mock drills) their "Cyber Crisis Management Plan (CCMP)". Compliance with the Cyber Crisis Management Plan requires multiple new initiatives to be implemented in the area of cyber security, such as implementation of Security Incident and Event Management software, Firewall for screening of network traffic between IT and OT networks, tool to scan traffic in OT networks, etc.
- All Power utilities also have to identify and report their "Critical Information Infrastructure (CII)" to CEA and NCIIPC to identify Nation wide CIIs in Power Sector.

ii) **Computer Security Incident Response Team Power (CSIRT)**

- Central Electrical Authority vide letter no. CEA.CH-13-12/11/2021-IT-Div./348 dated 06.10.2021 has formed CSIRT to work as single Nodal Agency for Cyber Security for entire power sector to deal with all emergencies of Cyber security in entire power sector.

b) To comply with the Regulations and Directions issued by various agencies mentioned above and specially to comply with the mandatory requirements of "Guidelines on Cyber Security for Power Sector" issued by the CEA, the Company need to take following steps:

- Continuous Monitoring (24 X 7) for Cyber Security related events and incidents occurring in IT and OT infrastructure and assets
- Regular monitoring and maintenance of Data Centre and related assets
- Timely reporting to all agencies for various requirements of compliance
- Procurement and maintenance of hardware, software and tools required for Cyber Security

- Maintain adequate number of skilled manpower to manage all compliances and also regularly upgrade skill sets for the involved manpower to meet latest International Cyber trends and challenges
- Carry out regular training and awareness session for the entire employee base and external parties on Cyber Security related matters.
- Engage external auditors and consultants time to time to check if Company's Cyber Security Posture is up to the required standards and what other measures can be taken to improve the same.

c) Accordingly, the Company is required to create infrastructure for compliance of the above Regulations and Directions. For the aforesaid purpose, The Company need to procure and install additional infrastructure (including servers, Firewall, communication bandwidth, network devices, Data Centre devices, etc) and cyber security related software and tools like AntiVirus, Security Information and Event Management (SIEM), OT Visibility Tool, Security Operation Centre (SOC), Endpoint Detection and Response (EDR), Mobile Device Management (MDM), etc to facilitate compliance of the Directions of the above mentioned Governing Bodies.

d) To comply with the requirement of "Guidelines on Cyber Security for Power Sector" issued by the CEA, the Company also needs to appoint and maintain an in-house Information Security Team with adequate manpower and with members like Chief Information Security Officer (CISO), Deputy/Alternate CISO and other necessary resources to manage cyber security for the organization and monitor various tools and software, etc. which will also add to the O&M on regular basis to comply with the need to continuously upgrade the skills of the employees responsible for managing cyber security.

e) Thus, in order to comply with the above-mentioned Regulations and Guidelines, the Company is required to purchase new hardware, software and tools and also required to recruit additional competent manpower leading to additional expenses O&M Expenses.

4.6.30 The Petitioner submitted that it will require to create infrastructure for compliance of the above regulations therefore DT and Feeder metering project is being proposed to facilitate compliance of the Directions of the Commission, Ministry of Power and Bureau of Energy Efficiency. The overall project comprises of installation and commissioning Energy Meters, LTCTs, Meter Boxes, associated communication devices along with HES application, Software Applications, IT Hardware, Data exchange and integration to fulfil the reporting requirements.

4.6.31 The Petitioner further submitted that, above-referred installation and commissioning of DT meters, Feeders and HES and Software will also entail annual maintenance cost thereof. The Petitioner also need to appoint Energy Manager, Financial Manager, IT Manager, Third Party Certified Accredited Energy Auditor etc. which will also have additional employee cost and consequently it will have to incur additional administrative cost on regular basis.

4.6.32 Petitioner submitted that in order to comply the above mentioned new / amended regulations, it will require to recruit additional competent manpower leading to additional expenses on employee cost, A & G expenses and R&M Expenses. Therefore, such additional O&M expenses required to be incurred to comply with the above Regulations promulgated subsequent to the MYT Regulations 2019, need to be allowed as additional O&M expenses over and above the normative O&M expenses determined under MYT Regulations 2019.

4.6.33 In this regard, the Petitioner would like to bring the kind attention of the Commission towards regulations 25 (e) & (g) of the MYT Regulations, 2014, the same are being reproduced below –

"*25. Operation & Maintenance Expenses*

(e) The One-time expenses and the expenses beyond the control of the Distribution Licensee shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check."

4.6.34 Petitioner submitted that expenses incurred for compliance of above rules and regulation are constitute "Change in Law" event as defined in Regulation 2(9) of MYT Regulations, 2019 as reproduced below:

"*2(9) "Change in Law" means occurrence of any of the following events: a) enactment, bringing into effect or promulgation of any new Indian law; or b)adoption, amendment, modification, repeal or re-enactment of any existing Indian law; or c) change in interpretation or application of any Indian law by a competent court, Tribunal or Indian Governmental Instrumentality, which is the final authority under law for such interpretation or application; or d) change by any competent statutory authority in condition or covenant of any consent or clearances or approval or Licence available or obtained for the Project; or e) coming* *into force or change in any bilateral or multilateral agreement or treaty between the Government of India and any other Sovereign Government having implications for the Transmission System regulated under these Regulations;"*

4.6.35 The Commission vide its Tariff Order dated August 26, 2021 and Tariff Order dated July 20, 2022 for the UP State Discoms has also allowed additional R&M expenses equivalent to 50% of Normative R&M expenses to comply with SOP regulations in addition to the Normative O&M expense. The extract of relevant para of the Tariff Order dated August 26, 2021 and dated July 20,2022 of the UP State Discoms is reproduced below:

"*Further, the Commission has directed the Licensees to strictly comply with the SoP regulations. Hence, for the first year of implementation, they would need additional support over and above the norms, to carry out the work and comply with the SoP Regulations and better consumer satisfaction. Hence, 50% of R&M expenses allowed for the year (as per norms) has been provided as additional one-time R&M expenses for proper execution of work in these difficult Covid time and to provide better services to the consumers also. The same shall be reviewed at the time of True-Up wrt to the actuals to the satisfaction of the Commission".*

[Tariff Order dated 26.08.2021 for UP State Discoms]

" 6.7.47. Further, in addition to the above, the Commission has approved new Regulations, which provides the framework for development of CGRF across the State in line with the provisions in the Electricity (Right of Consumers) Rules, 2020 notified dated December 31, 2020. The Regulation will be published in official Gazette shortly. As per this the constitution of CGRFs will be different from the existing framework which will result in increase in the number of CGRFs etc. As a result, the Petitioners will have to incur additional cost for successful implementation of these Regulations. Therefore, the Commission, provisionally allows 50% of R&M as additional O&M expenses for FY 2022-23 for constitution of CGRFs along with the implementation of SoP Regulations. The same shall be reviewed at the time of True-Up with respect to the actuals to the satisfaction of the Commission. The Petitioners are required to submit the expenses incurred under

the above provisional additional O&M expenses allowed along with the True Up of FY 2022-23."

[Tariff Order dated 26.08.2021 for UP State Discoms]

4.6.36 The Petitioner, in view of the above, has considered the impact of such additional O&M expenses @50% of the R&M Expenditure for the purpose of compliance of the New/amended Regulations and Directions as described above. The Petitioner has prayed to the Commission to approve the additional expenses equivalent to 50% of the normative R&M Expenses over and above the normative O&M Expenses Normative O&M Expenses as being allowed to UPPCL's Discoms.

4.6.37 The Petitioner, further submitted that as per the Accounting Statements, the actual O&M Expenses for FY 2021-22 are Rs. 137.90 Crore. Details of the O&M Expenses for FY 2021-22 along-with the amount provisionally approved by the Commission in Tariff Order dated August 26, 2022 are provided in table below.

TABLE 4-89: O&M EXPENSES FOR FY 2021-22 (Rs. Crore)

Sl. No.	Particulars	Approved	Normative	Actual
1	Repair & Maintenance Expenses	39.16	46.04	53.97
2	Employees Expenses including retiral benefits	31.25	33.04	68.26
3	Administrative & General Expenses	14.51	22.30	15.67
4	Exp. for SOP & Other Compliances	-	23.02	-
5	**Total O&M Expenses**	**84.93**	**124.41**	**137.90**

4.6.38 The Petitioner submitted that the O&M Expenses as determined on the basis of norms provided in Regulation 45 of MYT Regulations, 2019 are highly insufficient, skewed and are not reflective of the actual expenses in accordance with the business parameters as there is huge gap between the actual O&M expenses and the amount approved by the Commission on normative basis in accordance with the Regulations-45 of MYT Regulations, 2019.

4.6.39 The Petitioner submitted that the above referred A&G Expenses includes Finance Charges of Rs.1.12 Crore comprising expenses as detailed here-in-below :-

i) **Loan Processing Charges:** The Petitioner has negotiated a number of facilities in preceding years and also estimated the requirement for ensuing year.

During, FY 2021-22, the Company has incurred expenses aggregating to Rs. 0.17 Crore on renewal of the existing Working Capital Facilities including LC facilities for payment security of Power Purchase Agreements in accordance with their respective terms of agreement and issuance Commercial Paper to facilitate short-term funding of regulatory asset and working capital requirement.

ii) **Credit Rating Charges:** Credit rating of banking (Fund / Non-Fund based) facilities has become imperative under the Basel II Norms. As per these norms, unrated facilities will be financed at least 4.50% higher as per credit adequacy requirements in comparison with rated facilities. In order to comply with the above requirement of RBI and also to save additional 4.50% p.a. interest cost, the Company has been getting its credit rating from India Rating & Research (P) Limited.

iii) **Collection Facilitation Charges:** Continuing its efforts to provide maximum possible facilities to the consumers, the Company started various new initiatives for enabling consumers to make payment via Internet, Virtual Account, National Automated Clearing House, Bharat Bill Pay System, Bharat QR, UPI, NEFT / RTGS etc. The Commission vide Order dated May 29, 2015 has also directed the Petitioner to provide more avenues to the consumers for payment of electricity dues through Online Mode and has also directed it to bear charges for such service upto an amount of Rs. 4,000/- per transaction. Provisions of these facilities require some expenditure which has been included in Collection Facilitation Charges. Apart from being cost of new initiative these charges are directly related to revenue and with increase in tariff and revenue and increasing preference for Digital Payment modes by consumers, there is an increase in these charges.

iv) **Other Finance Charges:** There are other bank charges as well like loan documentation charges, LC Issue Charges, banking charges and other miscellaneous charges etc. It is pertinent to mention here that the Ministry of Power vide its order no. 23/22//2019-R&R dated June 28, 2019 mandated every Distribution Company to open a letter of credit for desired quantum of power in favour of the Generating Company. The relevant extract of the order is reproduced below for reference of the Commission.

" i.In accordance with Section 28 (3) (a) the NRLDC & RLDC shall despatch power only after it is intimated by the Generating Company and /Distribution

Companies that a Letter of Credit for the desired quantum of power has been opened and copies made available to the concerned Generating Company.”

4.6.40 The Petitioner requested that the O&M expenses for FY 2021-22 at actuals owing to following factors enlisted below to be considered by the Commission, being the same beyond the control of the Petitioner: -

Increase in Minimum wages

4.6.41 All enterprise, associations, partnership, body corporates etc. are bound by the provisions of Minimum Wages Act 1948 and Govt. of Uttar Pradesh under the provisions of the Minimum Wages Act, 1948 revises minimum wages twice in a year (i.e. with effect from April and October). The comparative revised minimum wages of U.P. during FY 2021-22 were as provided in Table below:

TABLE 4-90: MINIMUM WAGES IN STATE OF U.P. (Rs. Crore)

Class of Labour	As on 1st Apr'17	w.e.f. 1st Apr'21	w.e.f. 1st Oct'21	% Increase in C over A
	A	B	C	D
Skilled	9,119	11,185	11,316	24.09%
Semi-skilled	8,141	9,985	10,102	24.09%
Unskilled	7,400	9,078	9,184	24.11%

4.6.42 Petitioner submitted that it can be seen from the table above that the wages applicable from April 1, 2021 was higher by 24% as compared to wages prevailing on April 2017 (i.e. mean financial year considered for determination of norms). Thus, the wages applicable for full FY 2021-22 has been significantly higher as compared to the norms.

4.6.43 Petitioner further submitted that its license area is situated in National Capital Region (i.e. NCR) and the cost of living in this area is equivalent to the cost of living in National Capital Territory (i.e. Delhi). Thus, the impact of changes in minimum wages and other labour welfare schemes are echoed in NCR region as well. Accordingly, the changes in minimum wage rate of NCT Delhi also affect the cost at which labour is available in Delhi-NCRORE The minimum wages prevailing during FY 2021-22 in NCT-Delhi were higher by 70%-76% as compared to State of UP as show in Table below:-

TABLE 4-91: COMPARATIVE OF MINIMUM WAGES IN STATE OF U.P. AND NCT-DELHI WAGES (In Rs.)

Period	Particulars	Ref.	Skilled	Semi-skilled	Unskilled
Apr-21 to Sep-21	NCT-Delhi	A	19,291	17,537	15,908
	State of U.P.	B	11,185	9,985	9,078
	Variation	c=a-b	8,106	7,552	6,830
	Variation (%)	d=c/b	72%	76%	75%
Oct-21 to Mar-22	NCT-Delhi	E	19,291	17,537	15,908
	State of U.P.	F	11,316	10,102	9,184
	Variation	g=e-f	7,975	7,435	6,724
	Variation (%)	h=g/e	70%	74%	73%

4.6.44 The Petitioner also submitted that the minimum wages have a direct and substantial impact on most of the components of O&M expenses e.g. Breakdown gang, security charges, job costing of various repair assignments. Further, as lower cadre staff are governed by the provisions of the Minimum Wages Act-1948, increase in minimum wages also leads to consequent cascading effect on the remuneration of entire staff including senior level employees as well. Moreover, all enterprise, associations, partnership, body corporates, companies etc. are bound by the provisions of Minimum Wages Act 1948 and thus the Petitioner has no option but to comply with the same. Hence, the impact of the changes in minimum wages is beyond the control of the Petitioner and cannot be subsumed within normative employee cost.

4.6.45 The Petitioner submitted that it is very difficult for a private organization to quantify the impact of wage revision in its overall O&M Expenses. However, these revisions increase the overall cost where manpower cost is involved much more than the increase in CPI being allowed through normative Employee Cost. From the above, Commission may please appreciate that the amount of escalation allowed by the Commission is not taking into account the revisions in wages and the same should be considered also at the time of approval of employee cost.

4.6.46 The Petitioner also submitted that although the MYT Regulation, 2019 provides for escalation of normative Employee Cost on the basis of Consumer Price Index (i.e.

CPI), the resultant escalation is quite insufficient and more importantly the increase in minimum wages are not covered in CPI. Hence, the impact of increase in minimum wages are not get compensated through incremental CPI.

4.6.47 The Petitioner submitted that the Regulation 46 of the MYT Regulation, 2019 provides admissibility of Bad and Doubtful Debts as a legitimate business expense with the ceiling limit of 2% of the revenue receivables in the Tariff. However, the Petitioner has been able to contain the same to 1.01% during the FY 2021-22. This has resulted in huge saving in the Bad and Doubtful Debts which will ultimately pass on to the Consumers. The saving is depicted in the following Table.

TABLE 4-92: SAVINGS IN PROVISION FOR BAD DEBTS FOR FY 2021-22

Sl. No.	Particulars	UOM	Reference	Actual
1	Revenue billed for the year	Rs. Crore	a	1,939.66
2	Actual Provision for Bad & Doubtful debts	Rs. Crore	b	18.31
3	Provision as % of Revenue billed	%	c= b/a	0.94%
4	Normative Provision for Bad & Doubtful Debt @2%	Rs. Crore	d=a x 2%	38.79
5	Saving in provision for Bad & Doubtful debts	Rs. Crore	e=d-b	20.48

4.6.48 Petitioner submitted it has been able to limit Bad & Doubtful Debts at 0.94% against 2% on account of the fact that the it has deployed additional manpower for recovery of dues from the consumers, prompt billing, aggressive actions against theft, timely action against the defaulters etc. In case, the Petitioner opts to reduce its manpower to align actual employee cost with the normative employee cost as per MYT Regulations, 2019, it may lead to higher bad debts which will ultimately burden the diligent Consumers. Therefore, the Company should be allowed to recover its employee cost at actual.

4.6.49 **Recommendation of Sixth /Seventh Pay Commission:**

With implementation of the Seventh Pay Commission, the average pay of government employees has gone up more than 25% approx. including that of State Governments' employees. This will lead to considerable raise in salary package at entry level as well as higher level of employees in private sector also. In this backdrop, the Company has been facing an uphill task to retain talented and motivated workforce and minimize attrition in the increasingly competitive market with more and more participation of private sector in the utility segment including electricity distribution. Hence, it is necessary that the compensation structure on one hand meets the expectations of the employees and on the other hand motivates them to strive for superior performance through congruence of individual and organization goals. Therefore, any increase in emoluments given by the Central Pay Commission, will have a direct bearing on the salary and emoluments of the Company's employees so as to retain and motivate them appropriately.

4.6.50 **Needless to mention that the Commission has been approving the impact of change in pay scales as recommended and approved by various pay Commission to all State Discoms on actual basis**. Also, the MYT Regulations 2019 provides for separate approval of such expenses over and above normative employee costs. The Commission may kindly refer to the Regulation Regulation-45 (d) of the MYT Regulations 2019 in this respect as reproduced herein below:-

" 45. …

*(d) The One-time expenses such as expense due to change in accounting policy, arrears paid due to **Pay Commissions,** etc., and **the expenses beyond the control of the Distribution Licensee** such as dearness allowance, terminal benefits, etc., in Employee cost, **shall be allowed by the Commission over and above normative Operation & Maintenance Expenses** after prudence check..*

……."

[Emphasis Supplied]

4.6.51 Petitioner prayed the Commission to approve the O&M expenses on actuals considering the significant increase in salaries and minimum wages.

4.6.52 **Other Drivers affecting the O&M Expenses:**

Petitioner submitted that the Commission, in its various orders, has acknowledged the performance standards of the Petitioner and also in the Order dated January 29, 2019 has observed that NPCL is the best performing utility in Uttar Pradesh. The

Petitioner, having regard to the observation of the Commission, has been striving hard to control and optimize its O&M Expenses primarily keeping the consumers interest in view.

4.6.53 Petitioner submitted that regarding the distribution losses, due to weak and inefficient manpower with local administration, the law-and-order situation is very poor in the Greater Noida area with frequent and violent incidence occurring frequently. The administration or police personnel seldom finds time for attending complaints of pilferages/manhandling of the equipment's like transformer, cable etc. of the Petitioner. This in turn alleviate the expenditure on frequent breakdown and repair, resulting into more Repair and Maintenance expenses.

4.6.54 The Petitioner submitted that the Model Regulations provide for benchmarking the O&M Expenses of any Distribution Utility with its peers in the same State or outside State. The Commission in its Tariff Order dated October 14th, 2010 has mentioned that:

"22 (j) In relative analysis, performance parameters of other Distribution Licensees within the same state or in other states, shall be considered by the Commission to estimate norms."

4.6.55 Petitioner submitted that based on the above, the Commission in its Tariff Order dated October 14, 2010 has directed the company to conduct a study to benchmark its O&M Cost and accordingly ICRA Management Consultancy Services Private Limited was appointed to conduct the study through process of competitive bidding with prior approval of the Hon'ble Commission. Some of the important observations of their report are given below for the kind perusal and consideration of the Commission–

"Executive Summary- Clause 1.3 (Page 8):

Benchmarking of O&M expenses

The estimated expenses for each of the O&M expense components based on the econometric method is compared with the actual expenses in the Table below. The detailed discussion of each of the components follows.

TABLE 4-93: ACTUAL O&M EXPENSES OF NPCL COMPARED WITH BENCHMARKED EXPENSES (PAISE PER KWH) FOR FY 2011-12

Expenses	*R&M*	*Employee*	*A&G*	*Total*
Econometric method	*18.09*	*24.08*	*7.96*	*50.13*
Actual	*12.37*	*7.76*	*7.65*	*27.78*
Actual/Econometric	*68%*	*32%*	*96%*	*55%*

Executive Summary-Clause 1.7 (Page 12):

Conclusions

The analysis of O&M costs using both the approaches i.e. Peer Group and Econometric approach; reveals that NPCL has one of the lowest component wise O&M expenses. It can be concluded that NPCL has been the cost leader so far in respect of O&M cost but in future to continue to maintain its performance and system reliability, NPCL has to reorganize its maintenance policy such as preventive maintenance, regular health check-up of Transformers, continuous re-organization of network to meet the load dynamics efficiently, introduction of more departments/divisions for better and focused supervision and enhancing the level of automation.

The above measures would lead to increase in the O&M expenses in the short run but would ensure better and reliable power supply in future."

Chapter 12 - Conclusions (Page 95)

*The O&M expenditure per unit of sales for NPCL as **estimated based on econometric benchmarking method is significantly higher than the actual expenditure because of relatively higher level of operational efficiency and cost cutting being done by NPCL**. Such cost cutting includes:*

More than optimal utilization on the employees especially the breakdown teams

Higher dependence on reactive maintenance instead of preventive maintenance approach

Inadequate employee strength in areas such as legal and regulatory. For example, NPCL requires specialists to meet the requirements of changing regulatory context.

*It is to be noted that **such cost cutting is not sustainable in the future because of requirement of sustaining the operational performance standards.***

In the near future, NPCL is expected to have significantly higher O&M expenditure essentially as a consequence of increasing urbanization in its geographical area and other reasons as listed below:-

1. *Integration with Higher voltage to directly connect to National Grid*
2. *NPCL will have characteristics of Urban utilities leading to higher O&M expenditure due to reasons such as higher input cost and higher reliability requirements as explained earlier.*
3. *Need to additional manpower in Operations, Safety and Security of equipment's, Loss control cells, commercial to deal with large number of consumers etc.*
4. *Shifting from reactive maintenance to preventive maintenance practices*
5. *To continue to meet all the standards of performance laid out by UPERC, NPCL has to commit additional resources*
6. *Higher R&M and Employee expenses due to aging of equipment*
7. *Uncontrollable legal expenses to defend the interests of NPCL*
8. *Administrative factors specific to the utility. These factors include the need for strengthening the team in legal, administration / Public Relations and Regulatory areas to meet the growing demands."*

[Emphasis Supplied]

4.6.56 The Petitioner submitted that the above discussion significantly points out that it is no more feasible for the Petitioner to sustain the previous low-cost operation without compromising with service and safety standards. Therefore, the denial of justified expenses allowance to the Petitioner would jeopardise the operational efficiency achieved by the Petitioner over past 27 years. There is an urgent need for imminent allocation of higher O&M Cost to enable the Petitioner to maintain and improve upon the service standards and prepare itself for growing requirement of the consumers servicing.

4.6.57 The Petitioner further submitted that all these expenses have been duly audited by Statutory Auditors and approved by the Board of Directors of the Company. These expenses are allowed in full not only in the Companies Act, 2013 but also in the Income Tax Act, 1961. Hence, these expenses are genuinely and appropriately incurred towards the operations of the Company, and therefore, should be allowed in full.

4.6.58 The Petitioner submitted that their O&M Expenses are much lower than the other Distribution Utilities of U. P. as well Discoms of other States as shown in the table below:

TABLE 4-94: COMPARISON OF APPROVED O&M COST PER KWH SOLD

DISCOM	Volume - Latest	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
MAHARASHTRA								
MSEDCL	1,08,560	0.67	0.72	0.68	0.73	0.68	0.63	0.69
R-Infra - D	10,761	1.29	1.15	1.25	1.25	1.26	1.28	1.30
BEST	4,726	1.19	1.09	1.09	1.26	1.22	1.24	1.27
KARNATAKA								
BESCOM	28,566	0.51	0.57	0.58	0.66	0.70	0.87	NA
HESCOM	11,904	0.69	0.79	0.73	0.89	0.95	1.16	NA
MESCOM	5,678	0.85	1.02	0.92	1.18	1.26	1.40	NA
GESCOM	7,687	0.64	0.89	0.68	0.93	0.98	1.15	NA
CESCOM	6,806	0.74	0.95	0.77	1.05	1.11	1.30	NA
WEST BENGAL								
CESC	10,064	1.01	1.01	1.08	1.12	1.45	1.43	1.38
HARYANA								
UHVNL	19,782	0.56	NA	0.90	NA	0.79	NA	0.82
DHVNL	26,478	0.41	NA	0.64	NA	0.65	NA	0.70
ORRISSA								
NESCO	4,915	1.06	NA	NA	0.88	NA	1.03	1.45
WESCO	7,477	0.92	NA	NA	1.23	0.61	0.77	1.12
SOUTHCO	3,293	1.38	NA	NA	1.45	1.35	1.54	1.92
CESCO/CESU	7,545	1.13	NA	NA	1.02	1.31	1.16	1.67
DELHI								
BYPL	6,411	0.74	0.86	1.05	0.96	1.08	1.21	NA
BRPL	12,362	0.56	0.66	0.76	0.77	0.83	0.97	NA
NDPL	9,205	0.65	0.82	0.82	0.71	0.84	0.89	NA
NDMC	1,218	1.41	1.37	1.40	1.52	2.17	2.09	NA
UTTAR PRADESH								
DVVNL	22,523	0.31	0.38	0.43	0.50	0.39	0.57	0.38
MVVNL	21,704	0.41	0.56	0.63	0.53	0.49	0.59	0.45
PVVNL	32,170	0.24	0.26	0.31	0.40	0.36	0.43	0.37
PuVVNL	23,522	0.40	0.49	0.58	0.63	0.61	0.65	0.76
KESCO	3,767	0.56	0.54	0.53	0.92	0.71	0.84	0.78
NPCL (Claimed)	2,780	0.44	0.52	0.52	0.55	0.52	0.59	0.74
NPCL (approved)	2,780	0.34	0.40	0.39	0.37	0.35	0.30	0.37

(Source: Tariff Orders of respective SERCs)

4.6.59 The Petitioner submitted that the Benchmarking study is conducted by M/s Feedback Infra which also confirms that the Company is operating with a very low O&M cost. The relevant extract of their observation is reproduced here-in-below table

TABLE 4-95: O&M COST PER UNIT OF SALE (Rs./kWh)

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Private utilities			
NPCL	0.31	0.30	0.33
BRPL	0.50	0.48	0.52
BYPL	0.67	0.65	0.72
TPDDL	0.58	0.58	0.59
TPL (Surat)	0.29	0.32	0.32
CESC	0.81	0.94	0.99
State utilities			
NMDC	1.16	1.19	1.21
DVVNL	0.37	0.45	0.35
MVVNL	0.53	0.60	0.49
PVVNL	0.26	0.30	0.27
PuVVNL	0.53	0.51	0.51
KESCO	0.70	0.64	0.64
UHBVNL	0.81	0.49	0.76
JVVNL	0.35	0.37	0.40
PGVCL	0.28	0.23	0.31
BESCOM	0.42	0.44	0.48
WBDESCL	0.55	0.70	0.74
MSEDCL	0.68	0.74	0.77
NBPDCL	0.59	0.65	0.57
MePDCL	0.78	1.10	1.35
TSECL	1.15	0.91	-

O&M cost The reasonable cost of O&M works out to be in the range of INR 0.45 per unit to INR 0.55 per unit where most of the utilities are lying.

It is evident that NPCL has been managing O&M at the very low cost; however, with heavy stress on this front for NPCL in order to maintain quality supply, services and AT&C losses, NPCL may need to spend more in order to improve the services and supply. ”

4.6.60 The Petitioner submitted that from the table above it can be concluded that the O&M expenses of the Petitioner are one of the lowest in the country and with considerable growth in the area and aging of assets, it has become imperative for the Petitioner to take additional and timely efforts to meet the upcoming demand growth and to maintain a reliable and efficient power supply in the area. The

Petitioner has taken initiative in this regard which has also been acknowledged by the consultant viz. IMaCS. Therefore, the Petitioner submitted that the O&M expenses to be allowed in full as per Accounting Statements for FY 2021-22.

4.6.61 The Petitioner submitted that all the expenses it is incurring today is mainly to keep pace with the intense growth potential of the area. The Petitioner is trying its best to maintain its system, processes, network etc. to match the future demand and growth in mind and service the consumers on demand as and when they arrive. Thus, in the aforesaid per unit comparison, though the current O&M cost is already lower, but it will come down further in per unit terms as the demand of the area increases. In-fact, at present, despite being competitive in O&M cost, the volume of the Petitioner is much lesser as compared to other Discoms in the comparison. The Petitioner requested to the Commission to kindly take a holistic view in the matter and approve the actual, reasonable and genuine costs of the petitioner on actual basis.

4.6.62 The Petitioner also submitted that the O&M expenses approved by the Commission in its Tariff Order dated August 26, 2021 whereon normative basis in accordance with the Regulations-45 of MYT Regulations, 2019 which are grossly insufficient as compared to actual expenses incurred by the Petitioner. Therefore, the Petitioner requested that the Commission to approve the O&M expenses for FY 2021-22 as actually incurred and owing to various factors like minimum wages, High IT & automation expenses, increase in volumes, consumers numbers, office infrastructure etc.

Capitalization of Employee Cost:

4.6.63 The Petitioner has capitalized amount of Rs. 8.98 Crore out of the total employee cost of Rs. 68.26 Crore incurred during FY 2021-22, as per past practice duly approved by the Commission. The Petitioner that for the purpose of capitalization of employee costs, the Petitioner at the time of execution of project, records actual man hours spent by each engineer/ executive into the system / SAP Software. These hours are then matched with the cost per hour of that employee by the software itself and actual employee cost so incurred, is capitalized along with the specific project. The Petitioner further submitted that the entire process of its project/financial accounting is through SAP, and there is least manual intervention in computation of expenses to be capitalized.

4.6.64 Further the Petitioner submitted that these man-hours and cost are duly verified by the Statutory Auditors of the Company in detail and is approved by the Board of

Directors of the Company subsequently.

4.6.65 The Petitioner also submitted that the basis of the aforesaid policy, approved and followed consistently over the years, the Petitioner submits to the Commission to kindly approve the capitalization of employee cost at Rs. 8.98 Crore during F Y 2021-22.

4.6.66 Thus the Petitioner in view if the above requested the Commission to kindly approve the net O&M expenses at Rs. 128. 92 Crore incurred by the Petitioner during FY 2021-22 as summarized in table below:

TABLE 4 85: O&M EXPENSES (FY 2021-22) (Rs. Crore)

Sl. No.	Particulars	Approved	Normative	Actual
1	Repair & Maintenance Expenses	39.16	46.04	53.97
2	Employees Expenses including retiral benefits	31.25	33.04	68.26
3	Administrative & General Expenses	14.51	22.30	15.67
4	Exp. for SOP & Other Compliances @50% of R&M	-	23.02	-
5	**Total O&M Expenses**	**84.93**	**124.41**	**137.90**
6	Employee Cost Capitalised	(10.00)	(8.98)	(8.98)
7	**Net O&M Expenses**	**74.93**	**115.43**	**128.92**

Commission's Analysis:

4.6.67 As regard to O&M expenses, the Commission vide its deficiency letter dated January 06, 2023 sought reconciliation of claimed O&M expenses of Rs.128.92 Crore with Audited Accounts of FY 2021-22 (under each head of O&M i.e. Employee, A&G, R&M). In reply the Petitioner submitted the Reconciliation of O&M expense as below table:

TABLE 4-96: PETITIONER SUBMISSION OF RECONCILIATION OF CLAIMED O&M EXPENSE

Particulars	Formula	Expense claimed in True Up Petition for the FY 2021-22	Amount as per Audited Accounts for the FY 2021-22	Note No. in Audited Accounts for the FY 2021-22	Remark, if any
Employee Expenses	**A=A1+A2+…**	**59.29**	**59.29**		
Salaries, DA etc.	A1	51.55	62.43	Note-30	Salaries, wages and bonus as shown in Note-30
Bonus/ Exgratia To Employees	A2	8.94			
Earned Leave Encashment	A3	1.77			
Leave Travel Assistance	A4	0.18			
Provident Fund Contribution	A5	2.62	3.59	Note-30	Contribution to provident and other funds as shown in Note-30
Payment Under Workman's Compensation And Gratuity	A6	0.97			

Particulars	Formula	Expense claimed in True Up Petition for the FY 2021-22	Amount as per Audited Accounts for the FY 2021-22	Note No. in Audited Accounts for the FY 2021-22	Remark, if any
Payment Under Workman's Compensation And Gratuity	A6	1.04	1.04	Note-30 and Statement of Profit & Loss	Gratuity as shown in Note-30 Net of Remeasurements of post-employment benefit obligations of Rs. 0.04 Cr as shown in Statement of Profit & Loss
Medical Expenses Reimbursement	A7	0.78	1.19	Note-30	Staff Welfare Expenses as shown in Note-30
Staff Welfare Expenses	A8	0.42			
Less: Employee expenses capitalised	A9	(8.98)	(8.98)	Note-30	Capitalisation of expenses as shown in Note-30
A&G Expenses	**B=B1+B2+..**	**15.67**	**15.67**		
Lease/ Rent	B1	0.09	0.09	Note-33	Rent , Rates & Taxes as shown in Note-33
Conveyance And Travelling	B4	0.64	0.64	Note-33	Travelling and conveyance as shown in Note-33
Other Professional Charges	B3	6.10	9.09	Note-33	Legal and professional charges as shown in Note-33
Miscellaneous Expenses	B10	1.11			
Legal Charges	B11	1.89			
Miscellaneous Expenses	B10	0.08	0.08	Note-33	Directors fees as shown in Note-33
Telephone, Postage, Telegram & Telex Charges	B2	0.31	3.96	Note-33	Miscellaneous expenses as shown in Note-33
Conveyance And Travelling	B4	0.06			
License and Registration Fees	B5	1.38			
Fee And Subscriptions Books And Periodicals	B6	0.16			
Printing And Stationery	B7	0.26			
Advertisement Expenses	B8	0.12			
Water Charges	B9	0.00			
Miscellaneous Expenses	B10	1.66			
Auditor's Fee	B12	0.68	0.68	Note-33	Payment to auditors as shown in Note-33
Finance Charges	B13	1.12	1.12	Note-31	Other borrowing costs as shown in Note-31
…..					

Particulars	Formula	Expense claimed in True Up Petition for the FY 2021-22	Amount as per Audited Accounts for the FY 2021-22	Note No. in Audited Accounts for the FY 2021-22	Remark, if any
R&M	**C=C1+C2+...**	**53.97**	**53.97**		
Repair & Maintenance Expenses	C1	34.74	34.74	Note-33	Repairs and maintenance - transmission and distribution system as shown in Note-33
Repair & Maintenance Expenses	C1	9.12	9.12	Note-33	Repairs and maintenance - others as shown in Note-33
Repair & Maintenance Expenses	C1	8.41	8.41	Note-33	Security expenses as shown in Note-33
Repair & Maintenance Expenses	C1	1.59	1.59	Note-33	Insurance as shown in Note-33
Repair & Maintenance Expenses	C1	0.12	0.12	Note-33	Power and fuel as shown in Note-33
Repair & Maintenance Expenses	C1				
......					
Total	**D=A+B+C**	**128.92**	**128.92**		

4.6.68 The Commission vide its deficiency letter dated January 06, 2023 had sought head wise details of expenses incurred by the Petitioner towards the Smart Metering / DT Metering / SOP implementation in OPEX. In reply the Petitioner has submitted that vide its Petition No. 1919 of 2022 dated November 30, 2022 for compliance of UPERC (Standard of Performance) Regulations, 2019, Electricity (Rights of Consumers) Rules, 2020, Directions of Ministry of Power (CEA) (Installation and Operation of Meters) (Amendment) Regulations, 2019, Directions of Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021, Directions of Commission for 100% Feeder Metering/ Cyber Security related Regulations and Directions regarding Smart Metering/ DT Metering, Petitioner has recruited additional manpower and enhanced its infrastructure wherever required leading to additional employee cost, A&G expenses and R&M Expenses. Additional manpower has been employed across the organization viz. Break-down gangs with requisite vehicles, upgradation of Gangs from Two wheelers to Four wheelers, additional manpower in operations and control centre for management of calls and maneuverability of Break-down

Gangs etc., additional manpower in Commercial & metering to handle consumer complaints including site visits wherever required, increase in CRM and call centre executives to handle the larger volumes calls in a time bound manner with follow-up call etc. Further, the SOP regulations requires various information to be captured through IT Systems for calculation of claims and also for reporting purpose. For the purpose, more skilled manpower has been recruited in Information Technology and Automation along with associated infrastructure.

4.6.69 The Petitioner further submitted that cost of all these manpower and infrastructure has been claimed along with actual O&M expenses, being the same similar in nature and it will be difficult to assign and allocate the same against one or another function. Hence, the Petitioner has requested to the Commission to approve the O&M expenses on actuals basis or alternatively allow 50% of additional R&M expenses over and above the normative expenses as additional expenses towards compliance of SOP Regulations. The Petitioner submitted that detail justifications for the same have already been provided in Petition no. 1919 /2022 dated November 30, 2022.

4.6.70 The Petitioner further submitted that the Commission vide its Tariff Order dated 29.07.2021 and 20.07.2022 for the U.P. State DISCOMs has allowed additional R&M expenses equivalent to 50% of Normative R&M expenses to comply with SOP regulations in addition to the Normative O&M expense. The relevant extract of the Tariff Order dated July 20,2022 of the U.P. State DISCOMs is reproduced below:

Quote

6.7.46Further, the Commission has directed the Licensees to strictly comply with the SoP regulations. Hence, for the first year of implementation, they would need additional support over and above the norms, to carry out the work and comply with the SoP Regulations and better consumer satisfaction. Hence, 50% of R&M expenses allowed for the year (as per norms) has been provided as additional one-time R&M expenses for proper execution of work in these difficult Covid time and to provide better services to the consumers also. The same shall be reviewed at the time of True-Up wrt to the actuals to the satisfaction of the Commission".

6.7.47 Further, in addition to the above, the Commission has approved new Regulations, which provides the framework for development of CGRF across the State in line with the provisions in the Electricity (Right of Consumers) Rules, 2020 notified dated December 31, 2020. The Regulation will be published in official Gazette shortly. As per this the constitution of CGRFs will be different from the existing framework which will result in increase in the number of CGRFs etc. As a result, the Petitioners will have to incur additional cost for successful implementation of these Regulations. Therefore, the Commission, provisionally allows 50% of R&M as additional O&M expenses for FY 2022-23 for constitution of CGRFs along with the implementation of SoP Regulations. The same shall be reviewed at the time of True-Up with respect to the actuals to the satisfaction of the Commission. The Petitioners are required to submit the expenses incurred under the above provisional additional O&M expenses allowed along with the True Up of FY 2022-23.

Unquote

4.6.71 The Petitioner requested the Commission to approve the O&M expenses on actual basis or alternatively allow 50% additional R&M expenses over and above the normative expenses as additional expenses towards the above compliances.

4.6.72 The Commission vide its deficiency letter dated January 06, 2023 has sought summary of the details of the compensation paid to the consumers affected as per the UPERC (Standard of Performance) Regulations, 2019 and also provide the detail in which head the same is clubbed in the Audited Accounts. In reply the Petitioner submitted that it has been complying with the provisions of UPERC (Standard of Performance) Regulations 2019 and has not received any tenable claim for compensation under the SOP Regulations, 2019 during the year.

4.6.73 Further, the Regulation 45 of MYT Regulations, 2019 provides as follows:

Quote

45. Operation & Maintenance Expenses

a) The Operation and Maintenance expenses for the Distribution Business shall be computed as stipulated in with these Regulations.

b) The Operation and Maintenance expenses shall be derived on the basis of the average of the Trued-Up values (without efficiency gain / loss) for the last five (5) financial years ending March 31, 2019 subject to prudence check by the Commission. However, if Trued-Up values (without efficiency gain / loss) are not available for FY 2018-19, then last five (5) available Trued-Up values (without efficiency gain / loss) will be considered and subsequently when the same are available the base year value (i.e. FY 2019-20) will be recomputed.

c) The average of such operation and maintenance expenses shall be considered as Operation and Maintenance expenses for the middle year and shall be escalated years-on-year with the escalation factor considering CPI and WPI of respective years in the ratio of 60:40, for subsequent years up to FY 2019-20.

d) The One-time expenses such as expense due to change in accounting policy, arrears paid due to Pay Commissions, etc., and the expenses beyond the control of the Distribution Licensee such as dearness allowance, terminal benefits, etc., in Employee cost, shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check.

e) At the time of Truing-up of the O&M expenses, the actual point to point inflation over Wholesale Price Index numbers as per Office of Economic Advisor of Government of India and the actual Consumer Price Index for Industrial Workers (all India) as per Labour Bureau, Government of India, in the concerned year shall be considered.

45.1 Employee Cost

Employee cost shall be computed as per the following formula escalated by consumer price index (CPI), adjusted by provisions for expenses beyond the control of the Licensee and one-time expected expenses, such as recovery / adjustment of terminal benefits, implications of Pay Commission, arrears, Interim Relief, etc.:

EMPn= EMPn-1 × (1+ CPI inflation)

Where:

EMPn: Employee expense for the nth year;

EMPn-1: Employee expense for the (n-1)th year;

CPI inflation is the average of Consumer Price Index (CPI) for immediately preceding three Financial Years.

45.2 Repairs and Maintenance Expense

Repairs and Maintenance expense shall be calculated by following formula:

R&Mn= R&Mn-1 (1+ WPI inflation)

Where:

R&Mn: Repairs & Maintenance expense for the nth year;

R&Mn-1: Repairs & Maintenance expense for the (n-1)th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years.

45.3 Administrative and General Expense

A&G expense shall be computed as per the following formula escalated by wholesale price index (WPI) and adjusted by provisions for confirmed initiatives (IT etc. initiatives as proposed by the Distribution Licensee and validated by the Commission) or other expected one-time expenses:

A&Gn= A&Gn-1 (1+ WPI inflation)

Where:

A&Gn: A&G expense for the nth year;

A&Gn-1: A&G expense for the (n-1)th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years: Provided that Interest and Finance charges such as Credit Rating charges, collection facilitation charges, financing cost of Delayed Payment Surcharge and other finance charges shall be a part of A&G expenses.

Illustration: For FY 2020-21, (n-1) the year will be FY 2019-20 which is also the base year.

Unquote

4.6.74 The Petitioner submitted that, the Commission has disallowed the O&M Expenses due to error in computation of normative O&M expenses based on trued-up O&M expenses of FY 2015-16 to FY 2019-20 and has considered net Trued-up O&M expense of Rs.45.20 Crore and Rs.51.44 Crore in FY 2015-16 and FY 2016-17 respectively (after deduction of Employee Cost Capitalized) instead of gross trued-up O&M Expenses of Rs.52.10 Crore (FY 2015-16) and Rs.63.76 Crore (FY 2016-17).

4.6.75 In this regard, the Commission has considered gross value of Trued-up O&M Expenses for the last five years i.e. From FY 2015-16 to FY 2019-20. In case of Trued up values of FY 2015-16 & FY 2016-17, both the years were covered under the UPERC (Terms and Condition for Determination of Distribution Tariff) Regulation – 2006. In these Regulation the O&M Expenses were approved taking into consideration the Proceeding Years' Trued Up values & % age increment on the GFA addition which included the capitalization of Employee & other costs. Therefore, the effect of expenses capitalized is already built in the trued-up O&M expenses in the FY 2015-16 & FY 2016-17. Further, the Petitioner has already preferred an Appeal on the same issue and is sub-judice before the Hon'ble APTEL in Appeal No. 343 of 2022.

4.6.76 Regulation 45.3 of MYT Regulations, 2019, stipulates that the Interest and Finance charges such as Credit Rating charges, collection facilitation charges, financing cost of Delayed Payment Surcharge and other finance charges have been considered a part of A&G expenses. Accordingly, the finance charges have been considered as part of the A&G expenses. Further, the Commission is of the view that the UPERC MYT Regulations, 2019 do not provide any methodology / provision of computing the quantum of DPS & its financing cost, therefore it cannot be taken as normative. Further, seeing the genuineness of the need of financing cost of the DPS if the

Petitioner has actually incurred the financing of DPS and Petitioner can clearly demonstrate by the records, the same can be allowed to the Petitioner. If, the Petitioner has put in its equity in financing the DPS, it is to be noted that any excess equity (more than 30%) has already been considered as normative loan and interest has been given on it. Hence, Licensee has already received return of financing cost. Further, The Petitioner has already preferred an Appeal on the same issue and is sub-judice before the Hon'ble APTEL in Appeal No. 98 of 2021 (Tariff Order for the FY 2020-21). With regard to the claim of the Petitioner to include the additional O&M expenses i.e. expenses incurred for compliance of directive of the State Commission, impact of Service Tax, impact of GST and Cost of Borrowing of DPS, it has been observed that the Petitioner for the first time in the True up of FY 2021-22 has claimed these expenses as a part of normative O&M expenses. The Petitioner had claimed these expenses separately in the True up of FY 2020-21 which was also covered under the MYT Regulations, 2019. The Commission disallowed these expenses in the previous Tariff Orders hence these claim have not been considered for approving the norms of O&M Expenses. The Commission has already disallowed the financing cost of DPS & additional claim of impact of GST, hence, these claims have not been considered for approving the norms of O&M expenses for FY 2021-22.

4.6.77 Further, with regard to the Petitioner's claim towards additional expenses for implementation and compliance of newly promulgated Regulations, etc. over and above the normative expenses as being allowed to UPPCL's Discoms also, the Commission is of the view that there is no comparison in the operations of the 5 State Discoms & the Petitioner. The State Discoms cover almost the full state & have a vast network with high losses & also a non-favorable consumer mix as compared to the Petitioner. Taking the same into consideration the Commission has not approve the claim of the Petitioner in regard to allowing the additional cost (O&M) as done for State Discoms in FY 2021-22 and FY 2022-23.

4.6.78 As per the provisions of the Act, all electricity consumption is to be metered and its tariff to be determined by the Commission. All captive consumption of the distribution licensee is to be metered & billed as per the applicable consumer category provided in the Rate Schedule.

4.6.79 Regarding the petitioners claim to allow additional O&M regarding the payment of the captive consumption electricity bills, as the Commission has already finalised the base values of O&M for the control period & hence it would not like to go into the merit of the matter at this stage and proceedings. Hence the claim of the

Petitioner is not allowed.

4.6.80 The inflation indices considered by the Commission for FY 2021-22 is shown in the Table below:

Particulars	Whole Sale Price Index			Consumer Price Index		
	FY 2019-20	FY 2020-21	FY 2021-22	FY 2019-20	FY 2020-21	FY 2021-22
April	121.10	119.20	132.00	312.00	329.00	345.89
May	121.60	117.50	132.90	314.00	330.00	347.33
June	121.50	119.30	133.70	316.00	332.00	350.50
July	121.30	121.00	135.00	319.00	336.00	353.66
August	121.50	122.00	136.20	320.00	338.00	354.24
September	121.30	122.90	137.40	322.00	340.13	355.10
October	122.00	123.60	140.70	325.00	344.16	359.71
November	122.30	125.10	143.70	328.00	345.31	362.02
December	123.00	125.40	143.30	330.00	342.14	361.15
January	123.40	126.50	143.80	330.00	340.42	360.29
February	122.20	128.10	145.30	328.00	342.72	360.00
March	120.40	129.90	148.90	326.00	344.45	362.88
Average	**121.80**	**123.38**	**139.41**	**322.50**	**338.69**	**356.06**
Calculation of Inflation	**-**	**1.29%**	**13.00%**	**-**	**5.02%**	**5.13%**

TABLE 4-97: CPI & WPI Inflation Index Considered by the Commission for FY 2021-22

FY	CPI		WPI	
	Index	Inflation	Index	Inflation
FY 2017-18	284.42	3.08%	114.88	2.92%
FY 2018-19	299.92	5.45%	119.79	4.28%
FY 2019-20	322.50	7.53%	121.80	1.68%
FY 2020-21	338.69	5.02%	123.38	1.29%
FY 2021-22	356.06	5.13%	139.41	13.00%

Source for CPI: *https://labourbureau.gov.in/all-india-general-index-1*
Source for WPI: https://eaindustry.nic.in/display_data_201112.asp

4.6.81 Further, Normative O&M expenses for FY 2020-21 are escalated with the escalation factor considering CPI and WPI of corresponding year. Accordingly, the Commission, has computed the Normative O&M expenses for FY 2021-22 as depicted in table below:

TABLE 4-98: NORMATIVE O&M EXPENSES COMPUTED BY THE COMMISSION FOR NPCL FOR FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	True-up FY 2020-21	CPI and WPI		True-up FY 2021-22
		Normative	WPI	CPI	Normative
1	Employee Expenses	29.49		5.13%	31.00
2	R&M Expenses	38.25	13.00%		43.22
3	A&G Expenses	14.18	13.00%		16.02

Sr. No.	Particulars	True-up FY 2020-21	CPI and WPI		True-up FY 2021-22
4	**Gross O&M Expenses (1+2+3)**	**81.92**			**90.24**
5	Expenses Capitalised	9.82			8.98
6	**Net O&M Expenses (4-5)**	**72.10**			**81.26**

4.6.82 Further, the Regulation 8.2 (i) of MYT Regulations, 2019 specifies that the O&M expenses are Controllable Factors and Regulation 10 of MYT Regulations, 2019 specifies the treatment for Gains and Losses on account of Controllable Factors, the relevant extract of the Regulation is as under:

Quote

10 Treatment of Gains or Losses on account of Controllable Factors

10.1 Lower of the value as approved in ARR or actual value as per the True-Up shall be allowed by the Commission.

Unquote

4.6.83 The Audited figure in the Balance Sheet, wherein the licenses has claimed that these include the expenses incurred on the account of SOP implementation and other compliances. Which is perfectly fine for NPCL the commission has allowed R&M which is inclusive of (SOP, CGRM etc. implementation) and hence this value is considered as its audited values. It is expected that the Petitioner will implement SOP and CGRF Regulations within the Norms being approved by the Commission. Further the audited figures are inclusive of such expenses, hence Petitioner is directed to be shown these expenses towards SOP, etc. separately in Audited Accounts.

4.6.84 Accordingly, the Commission has approved the O&M expenses by considering the lowest of the normative, actual & audited value for each component (such as employee expenses, A&G expenses and R&M expenses) as shown in the table below:

TABLE 4-99: O&M EXPENSES AS APPROVED BY THE COMMISSION FOR FY 2021-22 (Rs. Crore)

Particulars	FY 2021-22				
	Approved in TO for FY 2021-22 dated 26.08.2021	Audited	Claimed in Petition	Normative (Computed)	Approved Upon Truing Up
Employee Expenses	31.25	68.30	68.26	31.00	31.00
Repair & Maintenance Expenses	39.16	53.97	53.97	43.22	43.22
Administrative & General Expenses	14.51	15.67	15.67	16.02	15.67
Gross O&M Expenses	**84.92**	**137.90**	**137.90**	**90.24**	**89.89**

Particulars	FY 2021-22				
	Approved in TO for FY 2021-22 dated 26.08.2021	Audited	Claimed in Petition	Normative (Computed)	Approved Upon Truing Up
Less: Employee Expenses capitalized	10.00	8.98	8.98	8.98	8.98
Net O&M Expenses	**74.92**	**128.92**	**128.92**	**81.26**	**80.91**

4.7 CAPITAL EXPENDITURE

Petitioner's Submission

4.7.1 The Petitioner has submitted that as per audited results for FY 2021-22, the actual capital expenditure incurred by the Company vis-a-vis the capital expenditure approved by the Commission vide its Tariff Order dated August 26, 2021 as given in the Table below: -

TABLE 4-100: DETAILS OF CAPITAL EXPENDITURE SUBMITTED BY THE PETITIONER FOR FY 2021-22 (Rs. Crore)

Particulars	Ref.	Approved	Actual
Total Additions to Assets	a	239.71	199.16
Less: Assets Retired	b	6.65	10.44
Net Capex	**c=a-b**	**233.06**	**188.72**
Consumer Contribution	d	112.51	78.79
Net Capex	**e=c-d**	**120.55**	**109.93**
Note: Total may not tally due to rounding-off			

4.7.2 Further, Regulation 44.2 of the MYT Regulations, 2019 provides as under:

Quote

44.2 The Capital Investment Plan shall be a least cost plan for undertaking investments. However, all capital expenditure projects of value exceeding Rs. Ten Crore and must have prior approval of the Commission on quarterly basis, and will be subject to prudence check.

Unquote

4.7.3 The Petitioner accordingly submitted that there is no scheme / projects of value exceeding Rs. 10 Crore and the detail of net capex of Rs. 109.93 Crore is as follows:

TABLE 4-101: CAPITAL EXPENDITURE FOR FY 2021-22 AS SUBMITTED BY PETITIONER (Rs. Crore)

Sl. No.	Nature of Works	Approved	Actual
I	New Connections, Replacement Stock & Metering	239.71	46.81
II	New Connection to Oppo Mobile India Pvt Ltd at 132 kV voltage level		54.89

Sl. No.	Nature of Works	Approved	Actual
III	Substations, Transformers, 33kV, 11 kV & LT Network		67.74
IV	Process System Automation		2.80
V	IT Projects		11.05
VI	Civil Works & Office Infrastructure Facility		9.52
VII	Tools & Testing Equipment		1.06
VIII	Vehicles		1.58
IX	Lease Hold Land		3.70
X	Sub-Total	239.71	199.16
XI	Interest Capitalization	Included above	NA
XII	Salary Capitalization	Included above	Included Above
XIII	Sub-Total	239.71	199.16
XIV	Less: Consumer Contribution	112.51	78.79
XV	Less: Assets Retired	6.65	10.44
XVI	Net Capital Expenditure	120.55	109.93

Note:
1. *Total may not tally due to rounding-off*
2. *Assets worth Rs. 3.67 Cr has been received from GNIDA and Other Agencies Free of cost for distribution of power and maintenance thereof.*

4.7.4 The Petitioner submitted that it has incurred the above capital expenditure solely for the purpose of developing its Distribution Network and supporting facilities to meet its service obligation as defined in Clause 4.1 and 4.2 of UP Electricity Supply Code, 2005 and also to meet growth in demand of electricity from its existing and future consumers. It is pertinent to mention that the above Capital Expenditure do not include any expenditure for the purpose of reduction of T&D Losses which are already at the least economically and technologically.

4.7.5 The Petitioner submitted the details of the above capital expenditure of Rs. 199.16 Crore (Rs. 120.37 Crore net of consumer contribution and assets taken over free of cost) incurred during FY 2021-22 are given below:

A. NEW CONNECTIONS, REPLACEMENT STOCK & METERING

a) New Connections

i. Petitioner, being the Distribution Licensee, has an obligation to provide electricity connection to all the intending consumers in its Licensed area in accordance with Section 43 of the Electricity Act, 2003, after receiving applications and payment of estimates. The estimates are prepared on the basis of site survey and as per the approved rates in Cost Data Book of UPERC. The expenditure is, therefore, incurred to provide these service connections, which includes extension of the distribution mains, erection of transformers, laying service cables, erection of meters etc., are to cater to the load of the potential consumer.

ii. A Housing Project is developed at Plot No.7, Sector P-4, Greater Noida by Central Government Employees Welfare Housing Organization having a total load requirement of 10 MVA. In order to cater to the load demand, construction of 33/11 kV Substation is constructed at the said premises. Approximately 3.5 KM of 33 kV grade underground cable is laid to energize the 33/11 kV Substation. The Substation building is constructed by the Developer and the electrical equipment along with 33 kV under-ground cable is procured and installed by the Company at consumer's cost. The above Substation, 33 kV network and the downstream 11 kV network will be handed over to the Company post energization for Operation and Maintenance purposes. All individual flats shall be provided connection through individual meters by the Company in compliance with the 13th Amendment of Uttar Pradesh Electricity Supply Code 2005.

iii. In accordance with the latest amendment of Electricity Supply Code 2005, all existing multi storied housing societies where power supply is being provided on Single Point bulk power scheme are being pursued to convert into Multi Point connections, wherein all individual flats will be provided with connections directly by the Company. The cost to be incurred for the purpose is divided into three major sub-heads i.e. Meter cost, creation of Communication Infrastructure & IT - Licensing cost. The Company has incurred the cost majorly in two head i.e. for converting 957 no. of connections from Single point to Multi-point and providing new connection to 4663 no. of consumers in new high-rise societies under multipoint scheme during FY 2021-22.

iv. As per Cost Data Book, approved vide order dated July 01, 2019, the Company recover Service Charge from consumers applying for new connection/ load augmentation. Accordingly, against the capital expenditure of Rs. 46.81 Cr onwards New Connection, Replacement Stock & Metering, the Company has recovered Rs. 23.90 Crore towards service charges which reduced from the total cost of aforesaid capital expenditure while considering the fund requirement, interest on loan, depreciation and return on equity. Thus, the expenditure incurred in respect of new consumers wherein the amount has been recovered from consumers, do not have any impact on the ARR for FY 2021-22 and subsequent years.

b) Replacement of Networks / Assets and metering

i. The existing electrical distribution network in the Licensed area is required to be upgraded by replacing the network elements from time to time in order to maintain the reliability and safety of electric supply. Owing to urbanization of villages due to rapid development of Greater Noida area, Company replaced PCC Poles installed earlier in villages with 12 meters. Steel Tubular Poles and increase the height of the Distribution mains in order to maintain the requisite safety clearance across the license area.

ii. As the area is witnessing incessant development; due to construction & excavation activities carried out by different agencies like GNIDA, IGL, BSNL etc., underground power cables frequently suffer from substantive damages, which at times require alteration of route, shifting of feeders / poles etc. Therefore, the amount for shifting of Cable and Poles including relevant accessories has been incurred in the Capex to ensure continuity of supply to consumers.

iii. In some of the areas, re-laying of the conductor at 11 kV and 33 kV lines with higher load capacity has been carried out to evacuate more power on the same poles due to non-availability of new corridor for laying new feeder.

iv. As some equipment are at the verge of completion of their operational life cycle, the same need to be timely replaced for maintaining reliability of the network. The capital expenditure has been incurred towards replacement & refurbishment of existing network / assets as mentioned above.

c) Metering

i. Replacement of Meter: The Distribution Licensee is obligated to replace Meters owing to any one of the following three scenarios:

ii. Burnt Meters – Burning of meters happen mainly due to faults in the consumers' installations / overloading beyond the rated current carrying capacity / fault in consumer premises / tampering of meters mainly in villages. It has been noticed many times especially in villages that the meters were actually jostled / tempered for illicit purposes rendering warranty of the metering equipment null and void and therefore, cost of these replacements incurred has been included in capital expenditure.

iii. Defective Meters – This kind of scenario primarily arises due to derating and degradation of internal components of the meter such as defective display, scroll button not working or due to internal component failures. Hence, requirement of accurate energy reading necessitated replacement of defective meters. This is to confirm all the meters defects due to any manufacturing defects within guarantee period are replaced free of cost. The cost of the same has been included in the capital expenditure.

iv. Stolen Meters – The theft of meters from consumer premises mostly occurs when the premises remains unoccupied and on arrival of consumers and his/ her complaints the company is asked to install meter. It also happens in the cases where meters have been shifted outside the premises of the consumer and the meter is damaged or stolen without the knowledge of the consumer. The cost of the same has been included in the capital expenditure.

d) Other Metering Activities:

i. Distribution Transformer Metering: Keeping in view the directions of the Commission, provisions of the Ministry of Power (CEA) (Installation and Operation of Meters) (Amendment) Regulations, 2019 vide Notification dated August 17, 2021 and the Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021, DT metering project has been initiated and the order for the same has been placed. The overall project comprises of installation and commissioning of Energy Meters, LTCTs, Meter Boxes, associated communication devices along with HES application, Software applications, IT Hardware, Data exchange and integration to fulfil the reporting requirements.

ii. Clustered metering arrangement: comprising set of 12-16 Bluetooth enabled meters installed inside the fenced enclosure, was taken up to ensure meter reading over Bluetooth.

iii. Upgrade of Meter and Instrument Transformer: As the electronic meters' accuracy is mainly dependent on software and ICs, it becomes necessary to upgrade these meters from time to time with latest versions along with communication facility. Accordingly, meters of existing consumers were upgraded along with instrument transformers, wherever deemed necessary to maintain accurate energy account.

iv. The capital expenditure towards metering & energy audit was done to enable the Company to comply with the directions of the Commission in its Order dated November 26, 2020 and Tariff Order dated December 04, 2020.

v. As stated above, in lieu of the aforesaid expenditure on new connections, the Company has recovered Rs. 23.90 Crore towards consumer contribution in accordance with the Cost Data Book duly approved by the Commission which has been considered as revenue in the Audited Accounting Statement. As mentioned above, the amount so recovered, does not have any impact on the ARR of Financial year 2021-22 and subsequent years.

vi. Petitioner has incurred the aforesaid amount aggregating to Rs. 46.81 Crore on 76 different / independent projects which were undertaken in different time periods during FY 2021-22 and at different locations across Greater Noida on New Connections, Replacement Stock & Metering. The project wise details have been enclosed along with petition from which, the Hon'ble Commission may kindly see the following:

- Executed total 76 number of projects during FY 2021-22;
- Minimum cost of one project incurred by the Company was only Rs. 251;
- Maximum cost of one project incurred by the Company was Rs. 4.19 Crore.

vii. In view of above, the Commission may observe that none of the individual projects have cost exceeding Rs. 10 Crore and therefore the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

B. NEW CONNECTION TO OPPO MOBILE INDIA PVT. LTD. AT 132 KV LEVEL

The Petitioner submitted that during FY 2020-21, M/s OPPO Mobiles India Private Limited, situated at Plot No.1, Ecotech-VII, Greater Noida applied for additional connection of 40 MVA with connectivity at 132 kV voltage level. Accordingly, the Company in turn applied to UPPTCL for grant of one bay at 132 kV at 400 kV Grid UPPTCL's Substation at Sec-148 Noida and for construction of dedicated line at 132 kV from the above substation to the plant facility of the consumer at Greater Noida on Deposit Work basis. The entire work is done by UPPTCL against consumer contribution received from M/s Oppo, however, being a distribution licensee, the cost of the 132kV Bay, dedicated line, metering and other associated equipment is capitalized in the books of the Company in FY 2021-22. Accordingly, the cost of Rs. 54.89 Crore is capitalized in FY 2021-22.

It is further submitted that entire amount of Rs. 54.89 Crore has been recovered from the Consumer, therefore, the same is being reduced from the total cost of capital expenditure while considering the fund requirement, interest on loan, depreciation and return on equity. Thus, the expenditure incurred in respect of this new connection to M/s Oppo Mobile do not have any impact on the ARR for FY 2021-22 and subsequent years

C. SUBSTATIONS, TRANSFORMERS, 33KV, 11 KV & LT NETWORKS

In order to cater to load/demand, various schemes are executed during FY 2021-22 as per details given below:

33/11 kV Substation

a) **Augmentation of Existing 33/11kV Substation & Upgradation to 33kV Switching Station with 33kV DB GIS**

The Petitioner augmented the existing 33/11kV Substation at UPSIDA Site C and upgraded it into 33/11kV Substation cum 33kV Switching Station with DB GIS Switchgear and one no. new 12.5 MVA power transformer. The aforesaid substation cum switching station is constructed on the land of existing 33/11 kV Substation with 1X12.5 MVA (New) + 1X5MVA (Existing) 33/11kV power transformer capacity which was installed to meet the demand of the Site – C Residential area and land was also used for the purpose of storage on inventory. Considering the load growth in adjoining Site – C Industrial area in last 2 – 3 years, the augmentation work of existing 33/11 kV Substation into 33/11kV Substation cum Switching Station has been completed on the same plot to cater to the load of Industrial & Commercial units as well as Residential sector developed by UPSIDC. The Substation has been connected to 2 nos. separate 33 kV Incoming Feeders from 220 kV RC Green Substation for better load management in case of events such as load shedding / shutdown / breakdown etc.

b) **Construction of 33 kV Network:**

i. As briefed earlier, Greater Noida area is being served by 33 kV feeders emanating from 132kV Surajpur Substation (8 nos.), 220/132/33 kV RC

Green Substation (21 nos.) and 400/220/132/33 kV Sector-148 Substation (5 nos.) which are largely situated towards the eastern part of the Greater Noida Area. During FY 2021-22, the Company executed the following schemes for the construction of 33kV Network:

ii. The Company was observing sharp rise in load / demand in Group Housing Societies, High Rise Buildings and Shopping Complexes in Greater Noida (West) area. The area is presently being served by 220 kV RC Green Substation and catered by 5 Nos. of 33 kV feeders with length of one circuit more than 25 kM. Present load of the area is approx. 80 - 90 MW, which is estimated to increase to 130 MW in the next 3 years. Outage in any one of 33 kV feeders interrupts the power supply of a large area. Hence, to improve reliability as well as cater to increasing load / demand of the area, the Company was granted connectivity of 100 MW from UPPTCL's 400/132/33 kV Substation at Sector 123, Noida along with 8 Nos. of 33 kV bays. In order to evacuate and connect these bays with the 33/11 kV Substations and other consumers in Greater Noida (West), the Company has laid 33 kV underground cables which was completed in FY 21-22. In FY 2020-21, the Company was granted 100 MW connectivity from UPPTCL's 400/220/132/33kV GIS Substation at Sector 148 Noida and accordingly, 33 kV feeders were constructed for evacuation of power from this Substation. These 33 kV lines apart from catering to the increased load demand of the area inter-alia created redundancy in some of the 33 kV circuits emanating from 220/132/33kV RC Green substation. The Kasna Industrial Area is becoming hub of Electronic Manufacturing Units and the Electricity load of the area is expected to rise to 50 MW in the next 2-3 years. The Company executed the work of laying of 33kV cables and extended the 33kV feeders in which to create redundancy and meet the load of new developing sectors viz. Ecotech-11 & Ecotech-1 Extn-1

iii. Apart from the above, the work of laying of 33kV cable for connectivity was completed, which will eliminate the overloading of existing 33 kV feeder & 33/11kV Substation at Udyog Kendra.

iv. In addition to strengthen the 33kV network, the Company has also laid the 33kV UG cable for better inter-connectivity of 33kV lines and Substations in order to improve consumers experience with less outages and more reliable power supply. Also, these interconnections will also provide N-1 redundancy during dire emergency conditions. The work of laying of 33kV cables for strengthening the 33kV network has been completed in developed sectors like Delta-3, Omicron-3, EPIP, Chi-IV, KP-1 etc.

c) Construction of 11 kV Network:

i. In order to meet the rising demand / load of the consumers, it was necessary to lay new 11 kV feeders to cater to the load requirement of Urban / Industrial / Village consumers. The new feeders apart from catering to increasing load demand of the area will alleviate the power burden on existing 11 kV feeders and will also be available to meet load during breakdowns / maintenance of adjacent 11 kV network.

ii. In order to meet the increasing demand / Load of LT consumers, Distribution Transformers have been installed in the Network. This will also enable the Company to meet the ever growing demand due to rapid urbanization of the village areas in Greater Noida and mushrooming colonies surrounding the village area.

iii. Further, the existing 11 kV lines was also strengthened to increase power carrying capacity.

d) Construction of LT Network:

i. In course of time, it has been observed that the existing distribution network of the urban sectors developed and handed over by GNIDA is prone to breakdown as well as incapable of catering to the increasing load of the urban households.

ii. Keeping in view the above situation, the Company has envisaged strengthening of the existing network by practicing proper load balancing as well as by creating ring main arrangement between Feeder Pillars and at the same time augmenting the distribution capacity of the existing network. The Company also strives to cater to the increasing consumer base by putting up load centered distribution transformer sources, subsequent underground LT network to achieve optimal loading of the network, high degree of voltage regulation, improved reliability of supply in terms of reduction in system downtime during breakdown.

iii. To facilitate the above-mentioned arrangements, capex has been incurred on account of construction of LT Network, which involves installation of feeder pillars, LT panels, laying of LT underground cables etc.

e) Network safety related work

The capital expenditure incurred for network safety like fencing of isolators / transformers / RMU / Meter Panel is Rs. 0.42 Crore.

The Company has incurred the aforesaid amount aggregating to Rs. 67.74 Crore on 42 different/ independent projects which were undertaken in different time periods during FY 2021-22 and at different locations across Greater Noida on Substations, Transformers, 33kV, 11 kV & LT Network. The project wise details have been enclosed as Annexure-8 from which the Hon'ble Commission may kindly see the following:

- The company has executed a total 42 number of projects during FY 2021-22;
- The minimum cost of one project incurred by the Company was only Rs. 24,987;
- The maximum cost of one project incurred by the Company was Rs. 7.79 Crore.

In view of above, the Hon'ble Commission may observe that none of the individual projects have cost exceeding Rs. 10 Crore and therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

D. PROCESS / SYSTEM AUTOMATION

a) Substation Automation Works

Petitioner has deployed substations which are employing latest technology i.e. IEC 61850 communication protocol along with IEC 104 & MODBUS protocols in line with the emerging technologies & operational requirements for Substation Automation. In FY 2021-22, the Company has implemented a new Substation Automation system at 2 (Two) sub-stations along with upgradation/retrofitting of Control Relay Panel (CRP) at old substations for operations to enable them for remote SCADA monitoring and operations along with upgrading infrastructure for communication with SLDC as per regulatory requirement.

Further, 2 no. open access consumers were also integrated with SCADA system for monitoring real time drawl. Also 3 Panel, 11 kV Switchboard installed at HV consumer premises are automated at 5 locations. Apart from above battery monitoring system were deployed at 4 number substations for monitoring VRLA batteries.

b) Automation Software and Control Room works

The Company has implemented SCADA, DMS & OMS system with MCC & BCC Configuration. The SCADA system is deployed and managed from a centralized control room at KP-4 office location of the company, thus SCADA operators monitor and control all the 33/11 kV substations, 11 kV Ring Main Units and other electrical equipment within power distribution network of the company remotely from SCADA. The functionalities covered through DMS are Network Connectivity Analysis (NCA), Operation Monitor (OM), Voltage VAR control (VVC), Load Shed Application (LSA), Fault Management and System Restoration (FMSR), Switching Sequence Management (SSM), Ground Grid Analysis (GGA), Load Flow Application (LFA), Quality of Service Indices, Energy Balance etc. The functionalities covered through OMS implementation helps to restore the supply more speedily, provide better consumer services, managing breakdown resources both vehicle and manpower more scientifically etc. Broadly OMS system comprises of Customer Information System (CIS)/CRM, Interactive Voice Response System (IVR) integration, Call Over Flow (COF) systems, Crew reporting information etc. and it has integration with SCADA-DMS system for real time data update and GIS system to provide better consumer services.

In view of expansion of SCADA/DMS/OMS coverage in the network, the growing number of users and owing to widespread location of users including division/zonal level personnel involvement in monitoring and analysis, a division level setup for SCADA system was already deployed. In similar context, OMS system setup at division level offices is also implemented in FY 2021-22.

c) Implementation of BMS, OMS Facility and Smart Grid Lab

Petitioner has successfully setup a Master Control Center (MCC) with full-fledged SCADA, DMS & OMS system which operates on 24X7 basis and performs real time data monitoring, operation & control and decision making facility through Centralized control room engineer. Following mentioned functionalities are available in control center(s) for ergonomically effective design in below Table:

TABLE 4-102: MASTER CONTROL CENTER

S No.	Facilities
1	Video projection system
2	Optimal work environment
3	Precision air conditioning
4	IT security
5	Fire resistant doors
6	UPS & battery room
7	Building management system
8	Server room
9	Network and switching room
10	CCTV for monitoring

The company adopts the philosophy of Building Management System (BMS) in other non-office locations viz., existing substations that has been upgraded with building management functions of fire alarm detection, public address system along with surveillance system for better remote monitoring and management of substations, which is completely unmanned. On similar ground, store of automation department is also equipped with access control system, CCTV system and Fire Alarm System in FY 2021-22.

In FY 2021-22, Smart grid lab is also upgraded with introduction of information kiosk on OT cybersecurity for learning and training purpose.

d) Upgradation/ Development of Communication System

The Company has deployed its own communication system for data and voice system between various offices and from Substations to ensure independent and secured flow of data. Optical fiber is used as main as well as ring communication network amongst all 33/11kV Substations & Company's offices.

NMS (Network Management Software) is used to monitor healthiness of fiber & reports are generated and delivered via e-mail. The technological evaluation and better connectivity uptime warrant to have a hybrid technological system and therefore other mediums are also implemented viz. RF communication.

Connectivity for all new requirements in commensuration with network, office space and other field automation related activities are also provided.

With a vision to expand the horizon of securing, automating and controlling the electrical network in the downstream network from substations for a reliable, safe, fast and centralized decision making; the pocket substations in the downstream distribution network are connected with existing OFC communication network of the company.

e) Field Area Network Automation

The emerging and tested technologies like communicable & non-communicable Fault Passage Indicators, Automation of Ring Main Unit by making it communicable, real time monitoring & detection of transformer faults using communicable FRTUs are implemented to ensure improvement in supply reliability along with integration in SCADA, DMS & OMS project. This has helped in minimizing downtime & easy identification of fault & fault location and also minimizing restoration time.

With the increase in no. of 11 kV feeders and the RMUs for the remote operation, RMU automation with FPI (Fault Passage Indicator) & C.B. / Load break switch status monitoring from remote station were deployed using GPRS based Feeder remote terminal units (FRTUs) which resulted in better network monitoring, management, supply restoration and thus enabled to serve consumers with more efficacy.

In FY 2021-22, RMUs were automated with installation of FRTUs and GPRS routers along with integration to SCADA system. In addition, main feeder pillars near automated RMUs are also integrated to mini SCADA system and OMS system.

f) Smart Grid Initiatives

As per 13th amendment of the Electricity supply code vide notification no. UPERC/SECY/Regulations/Supply code/2018/206 dated August 10, 2018 and further suo-moto proceedings by UPERC on dated May 17, 2019 and August 05, 2020 and subsequent guidelines, the pre-paid AMI compliant smart meters are deployed at new societies and also conversion of existing societies having feasibility and approval for conversion of single point to multi-point connection.

The infrastructure requires enabling of robust two-way communication infrastructure at societies at distributed locations, which are met using hybrid communication channels like RF mesh and GPRS technology.

In FY 2021-22, housing societies were covered for implementation of DRDR (Dual Register Dual Recharge) smart meters along with integration to Head End system and company's SAP system for consumer billing and recharge management.

g) New Initiatives in GIS

A specialized hardware workstation has been deployed in Automation lab. The specialized hardware workstation was required for deployment of Theft Detection Model created using a Deep Learning Module on the drone orthomosaic imagery for automatically identifying the potential theft cases by detecting electrical wire on the top of the buildings.

h) Implementation of CCTV based Surveillance System

Petitioner has already deployed its own CCTV based surveillance system for real time asset monitoring at various offices and from Substations to ensure safety of all assets, undue infringement by any unknown external or internal personnel on restricted area where critical installations of utility are placed such as Substation yards, control panel room, IT data centers, billing and customer care etc. The Company is continuously engaged in covering entire distribution area covered under 24X7 surveillance.

In view of above, new substations are equipped with CCTV surveillance system. In addition, pocket substations were also installed with CCTV surveillance system.

The Company has incurred the aforesaid amount aggregating to Rs. 2.80 Crore on 36 different / independent projects which were undertaken in different time periods during FY 2021-22 and at different locations across Greater Noida on Process & System Automation. The project wise details have been enclosed along with petition from the Hon'ble Commission may kindly see the following:

The company has executed a total 36 number of projects during FY 2021-22;

The minimum cost of one project incurred by the Company was only Rs. 1,897;

The maximum cost of one project incurred by the Company was Rs. 0.45 Crore.

In view of above, the Hon'ble Commission may observe that none of the individual projects have cost exceeding Rs. 10 Crore and therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

E. IT PROJECTS

The Petitioner submitted that the Capital Expenditures which took place under IT initiatives in FY 2021-22 were primarily in the migration of SAP ERP to S/4HANA and in enhancing the infrastructure to meet the growing computing and networking needs of the organization. Following initiatives had been taken up during the period.

a) Implementation of Software Applications

The SAP S/4HANA migration project involved migration to a new ERP which provides functionalities that can help in revamping/ upgrading core processes and at the same time maximize efficiencies of processes. Also, initiative has been taken to strengthen the processes of IT Change Management by instituting automated testing and other related controls.

b) Upgrading of Hardware Infrastructure Capacity

Augmentation in hardware storage capacity to host and manage data growth had been taken up. Also, Purchase of new Servers and UPS systems to support installations in Offices / Substations were the other initiatives in this area took place.

c) Upgrading of Networking Infrastructure

Initiatives related to network capacity augmentation to enhance and upgrade the networks of offices and substations had been taken up. Apart from that, Firewall at the DR site was also replaced as the existing Firewall had become obsolete.

d) Purchase of Computers, Peripherals & Accessories

Purchase of new computers, mobiles and other peripherals was done to meet the increasing computing requirements as well as to replace obsolete devices.

e) Purchase of Software Licenses

Purchase of licenses of Backup software was necessary to enable backup of new Servers commissioned in the period. Additionally, expenses associated with licenses for SAP S/4HANA are also included as the project has gone live in FY 2021-22.

The Company has incurred the aforesaid amount aggregating to Rs. 11.05 Crore on 15 different/ independent projects which were undertaken in different time periods during FY 2021-22 and at different locations across Greater Noida on IT Projects. The project wise details from which, the Hon'ble Commission may kindly see the following:

- The company has executed a total 15 number of projects during FY 2021-22;
- The minimum cost of one project incurred by the Company was only Rs. 0.01 Crore.;
- The maximum cost of one project incurred by the Company was Rs. 5.03 Crore.

In view of above, the Hon'ble Commission may observe that none of the individual projects have cost exceeding Rs. 10 Crore and therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

F. CIVIL WORKS AND OFFICE INFRASTRUCTURE FACILITY

The civil work is majorly required for construction of 33/11 kV Substation, Office Building and construction of Boundary walls of ESS plots allotted by GNIDA. The Company executed the following civil works during FY 2021-22.

a) Civil Construction of 33/11kV Substation & Office Building viz. Ecotech-11, Ecotech-1 Extn.-1 & Ecotech-3 Phase-2. The civil work includes construction of Control Room Building, 33/11kV Power Transformer Plinth with Oil Tank, HT & LT cable trenches, Plinth for 11/0.415 kV Station Transformer, plinth for RMU and Guard Room.

b) Civil Construction of Boundary wall at an ESS plot measuring 3000 sq meters at Techzone-2 was also completed in FY 2021-22. The construction of boundary wall has been done to safeguard the ESS plot from unauthorized encroachment. It is pertinent to mention here that land allotted by GNIDA for the above substation is significantly below the existing ground level. Resultantly, the boundary wall was constructed on RCC structure up to Normal Ground Level (Road Level) and further with brickwork above NGL (Road Level).

c) In addition to the above, the Company also completed and executed the work of construction of Boundary wall for 11/0.415kV Pocket Substations handed over by GNIDA, for safety of assets and public. It is pertinent to mention that GNIDA had earlier handed over these pocket substations without any permanent and proper boundary wall, which endangers the human life and may also result in theft of assets.

d) Petitioner has incurred the aforesaid amount aggregating to Rs. 9.52 Crore on 9 different/ independent projects which were undertaken in different time periods during FY 2021-22 and at different locations across Greater Noida on Civil Works and Office Infrastructure. The project wise details from which the Hon'ble Commission may kindly see the following:

- The company has executed a total 9 number of projects during FY 2021-22;

- The minimum cost of one project incurred by the Company was only Rs. 0.02 Crore.;
- The maximum cost of one project incurred by the Company was Rs. 2.43 Crore.

e) In view of above, the Hon'ble Commission may observe that none of the individual projects have cost exceeding Rs. 10 Crore and therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

G. TOOLS AND TESTING EQUIPMENT

a) In its endeavour for continuous improvement / modification / upgradation in the current O&M practices / activities, the Company through introduction of cutting-edge technology in Testing & Maintenance Equipment encourages & ensures occupational safety of the personnel. It is facilitated through replacement of existing worn out tools and deployment of safety equipment and Meter reading instruments in line with the best O&M practices prevailing across various sectors.

b) **Meter testing equipment:** Meter testing equipment like LT Accucheck, HT Accucheck, Primary Injection kit and associated equipment are part of day-to-day activities in order to attend to consumers' meter testing request and ensure healthy operational practices within the organization. Accordingly, various testing equipment and associated components were procured to meet the requirement. Better testing practices contributed towards better consumer satisfaction by ensuring timely resolution of consumer complaints.

c) **Fault Locating Van up to 40kV (SFX40)**: The Company has 1672 km of HT Underground cable (33 kV & 11 kV) network and for restoration of the network during the breakdown, pinpointing of fault in UG network/system is the prime & main objective to proceed further with Cable Jointing work. This equipment is used to pin-point the fault so that immediate corrective action can be taken to restore supply. Earlier the Company had one Fault locating Van, Mounted on Tata 407 Van, which was procured in the year 2010. Both the cable fault locating system & Van had already lived their fruitful life and now facing recurring problems in the system. Since Aug'21, Fault locating system is in breakdown & M/s Megger had confirmed that the system is now beyond repair and, needs to be replaced or upgraded, therefore, a new cable fault-locating van is procured during FY 2021-22.

d) Petitioner has incurred the aforesaid amount aggregating to Rs. 1.06 Crore on 2 different/ independent projects which were undertaken in different time periods during FY 2021-22 and at different locations across Greater Noida on Tools & Testing Equipments. The project wise detail from which the Hon'ble Commission may kindly see the following:

- The company has executed a total 2 number of projects during FY 2021-22;
- The minimum cost of one project incurred by the Company was only Rs. 0.05 Crore.;
- The maximum cost of one project incurred by the Company was Rs. 1.06 Crore.

e) In view of above, the Commission may observe that none of the individual projects have cost exceeding Rs. 10 Crore and therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

H. VEHICLES

a) Petitioner is required to provide vehicles to its officers/ staff for various official work including loss control drives, field duties i.e. visiting Substations, transporting heavy materials etc., shift-based duties in call centre, control room etc. and inter office movement to provide 24X7 reliable power supply in its licensed area and many other office related assignments including attending meetings/ court proceedings/ inspection of materials / vendor-verifications etc. in NCR and nearby States. The provision of vehicles not only ensures efficient and prompt services in economical manner but also necessary to ensure safety of its employees being working even in the odd-hours / night time. The Hon'ble Commission will appreciate that no power distribution utility can work without vehicles which are as basic & necessary as furniture, office equipment such as computers, printers etc.

b) The vehicles are essential for smooth movement of company's officials for efficiently providing services to the consumers in the licensed area which is spread over 335 Sq. Kms and the distance from east to west ranges from 45 - 50 Kms approx. The vehicles are purchased after detailed evaluation of the requirements and as per the policy of the Company. It is submitted that such requirement comprises of replacement of old and inefficient vehicles as well as new requirement to service the fast-increasing load as well as consumer base of the Company in the most economical and efficient manner.

c) The Petitioner has incurred the aforesaid amount aggregating to Rs. 1.58 Crore on 11 different vehicles during FY 2021-22. The vehicle wise details from which the Hon'ble Commission may kindly see the following:

- The Petitioner has purchased a total 11 number of vehicle during FY 2021-22;
- The minimum cost of one vehicle incurred by the Company was only Rs. O.09 Crore;
- The maximum cost of one vehicle incurred by the Company was Rs. 0.29 Crore.

d) In view of above, the Hon'ble Commission may observe that none of the individual vehicle have cost exceeding Rs. 10 Crore and therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

I. LEASE HOLD LAND (REGISTRATION CHARGES, STAMP DUTY ETC.):

a) Greater Noida Industrial Development Authority ["GNIDA"] has earmarked land parcels for Electric Substations & associated facilities in its Master Plan. Based on the roll out of the development in a particular area, the Company is advised to seek allotment of land for construction of Electrical Sub-station etc.

b) At times, the Company is also advised to secure allotment of earmarked lands for Electric Substation etc. in advance in order that these are not allotted for other purposes under pressure due to scarcity of land in the given areas.

c) It is also pertinent to mention that, with the fast development of the Greater Noida area, it is prudent to seek allotment of land well in advance so that electric substation and other associated facilities can be created without any hindrances as per the requirement. It is generally seen that with the fast pace of development of the city, the land parcels become scarce and costly also.

d) For example, with the fast pace of development in the Greater Noida West Area, the land required for electric substation was not available and after lot of efforts & persuasion, the Company was asked to accept allotment in the Green Belt and/or in an area not appropriate/ suitable - for electric sub-station. Accordingly, the Company has been seeking allotment of lands from GNIDA from time to time, take possession and construct the boundary wall to protect from encroachments, which are quite rampant in the area.

e) It is pertinent to mention that the total cost per square meter including registration charges etc. of the lands leased from GNIDA prior to FY 2015 is @ Rs.1,600/- to Rs.6,500/- per sq. meter whereas the prevailing rates are ranging between Rs.13,000/- to Rs. 22,500/- per sq. meter (excluding onetime lease rent charges, registration charges etc.). Apart from the increasing rates of the land, the availability thereof is already a big challenge.

f) In this regard it is relevant to mention that Greater Noida Area is a fast-developing city being developed by GNIDA in a planned and systematic manner. At the time of development of the area, GNIDA prepares and design sectors for the purpose of further development or lease of the same to allottees. At the same time, in order to plan the distribution of electricity in these sectors, GNIDA also earmark the land for the purpose of development of electrical infrastructure including substations. Therefore, the Company in consultation with GNIDA apply for the allotment of lands.

g) That it is pertinent to mention that any capital project has a gestation period and before the start of the project, availability of appropriate land is a critical. There are instances wherein because of non-availability of land, the Company has to resort to purchase of private land at costlier prices detriment to the interest of consumers. In fact, many a project in Greater Noida (W) today are stuck / delayed due to non-availability of land. Thus, allotment of land in line with the GNIDA planning is the most ideal, critical and appropriate manner for efficient and economical development of Distribution Network.

h) In view of above, GNIDA has allotted one land to the Company During the FY 2021-22, of size 2400 Sq. mtr., for construction of 33/11KV Substation at Sector-1. Registration formalities are done for this land during the 3rd quarter itself at a total capital expenditure of Rs. 3.70 Cr. As per relevant accounting standards, 'the asset' 'which is ready to put to use' is also treated as CAPEX accordingly the same has been capitalized in the Books of Accounts during FY 2021-22 itself.

i) It is kindly submitted that the land will be utilized for construction of upcoming 33/11 kV Substation to cater to the load of Greater Noida (West). The Hon'ble Commission is kindly requested to approve the capital expenditure of Rs. 3.70 Cr. incurred by the Company towards the cost of Land.

J. ASSETS TAKEN OVER FROM GNIDA

a) It is also pertinent to mention here that GNIDA, DMIC, UPSIDC, EPIP etc. are the local development authorities responsible for the development and upkeep of Greater Noida area. Every year the basic electric LT network developed by such agencies is handed over to the Company for facilitation of distribution of power to the consumers of Greater Noida and proper maintenance thereof without transferring the ownership of the same. Hence, for the purpose of accounting, upkeep and insurance, the Company considers these assets at the value declared by such agencies which is accordingly considered for the purpose of determination of tariff. Since the ownership of these assets is not transferred to the Company, they are not considered in addition to fixed assets. Hence, there is no impact on computation of ROE, interest on Term Loans and depreciation with respect to these assets.

b) Further, GNIDA and other state agencies, being the local development authorities, develops the basic electrical network in the newly developed sectors and hand over the same to the Company for operation and maintenance purposes. Since, GNIDA and other agencies only provides the possession of these assets for the purpose of distribution of electricity without transferring the ownership, the Company does not claim ROE, Interest or Depreciation on such assets being handed over by GNIDA.

c) The details of assets taken over from GNIDA and Others during FY 2021-22 is provided in Table-below: -

TABLE 4-103: ASSETS HANDED OVER BY GNIDA (FY 2021-22)

Asset Description	Amount (Rs. Cr.)
High-Tension Earthing with GI Earth Pipe	0.04
High-Tension Tower, Poles, Fixtures & Devices	0.88
High-Tension Conductors & Devices	0.90
High-Tension Underground Cable & Ducts	0.15
Low-Tension Underground Cable & Ducts	0.73
Meter Board Panel etc.	0.97
Total	3.67

4.7.6 The Petitioner submitted as per Regulation 20.1 of the MYT Regulations, 2019, the capital expenditure is required to be funded in the Debt-Equity ratio of 70:30. Accordingly, based on capex for FY 2021-22, the details of the funding of the aforesaid capital expenditure is given in the Table below: -

TABLE 4-104: CAPITAL EXPENDITURE FUNDING FOR FY 2021-22 (Rs. Crore)

Particulars	Ref.	Approved	Actual
Total Additions to Assets	d	239.71	199.16
Less: Assets Retired	e	6.65	10.44
Net Capex	f=d-e	233.06	188.72
Consumer Contribution	g	112.51	78.79
Net Capex	h=f-g	120.55	109.93
Debt - 70%	i=h x 70%	84.39	76.95
Equity- 30%	j=h x 30%	36.17	32.98

Commission's Analysis:

4.7.7 The Commission as per the provisions specified under the Regulations 18, 19 & 44 of MYT Regulations, 2019 has approved the Capital Expenditure for FY 2021-22. The relevant extract of the aforesaid Regulations are reproduced below:

Quote

18 Capital Expenditure/ Cost and Capital Structure

18.1 Capital cost for a capital investment Project shall include:

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, as admitted by the Commission after prudence check;

(b) capitalised initial spares subject to the ceiling rates stipulated in these Regulations;

(c) expenses incurred by the Licensee on obtaining right of way, as admitted by the Commission after prudence check;

(d) additional capital expenditure determined under Regulation 19;

(e) Incidental expenditure during construction including apportioned expenditure on relevant components of O&M:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost;

(f) any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed up to the date of commercial operation, as admitted by the Commission after prudence check:

Provided that any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed up to the date of commercial operation shall be adjusted only against the debt component of the capital cost:

Provided further that the capital cost of the assets forming part of the Project but not put to use or not in use, shall be excluded from the capital cost:

Provided also that the Licensee shall submit documentary evidence in support of its claim of assets being put to use;

The capital cost admitted by the Commission after prudence check shall form the basis for determination of Tariff.

18.2 The capital cost admitted by the Commission after prudence check shall form the basis for determination of Tariff.

18.3 The actual capital expenditure on a scheme as on COD for the original scope of work based on audited accounts of the Licensee or Project, as the case may be, shall be considered subject to prudence check by the Commission.

18.4 Capital cost to be allowed by the Commission for the purpose of determination of Tariff will be based on the capital investment plan prepared by the Licensee and approved by the Commission, prior to the Petition for determination of ARR / Tariff filing

19 Additional Capitalisation

19.1 The capital expenditure, actually incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date, may be admitted by the Commission subject to prudence check:

- *(i) Undischarged liabilities recognized to be payable at a future date;*
- *(ii) Works deferred for execution;*
- *(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 18;*
- *(iv) Liabilities to meet award of arbitration or for compliance of the Order or decree of a court of law; and*
- *(v) Change in law or compliance of any existing law*

Provided that the details of works included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the Petition for determination of final Tariff after the date of commercial operation.

19.2 The capital expenditure, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the Order or decree of a court of law;

(ii) Change in law or compliance of any existing law;

(iii) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments, etc.;

(iv) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;

(v) Any additional capital expenditure which has become necessary for efficient operation;

Provided that the claim shall be substantiated with the technical justification duly supported by documentary evidence like test results carried out by an independent agency in case of deterioration of assets, damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;

(vi) Any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, batteries, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, which has become necessary for successful and efficient operation of Transmission System; and

(vii) Any capital expenditure found justified after prudence check necessitated on account of modifications required:

Provided that any expenditure, which has been claimed under Renovation and Modernisation or repairs and maintenance under O&M expenses, shall not be claimed under Additional Capitalisation.

19.3 Impact of additional capitalisation on Tariff, if any, shall be considered during Tariff determination proceedings.

……

44 Capital Investment Plan

44.1 The Distribution Licensee shall submit a detailed Capital Investment Plan, financing plan and physical targets for each year of the Control Period for meeting the requirement of growth in number of consumers, strengthening and augmentation of its distribution network, meeting the requirement of load growth, reduction in distribution losses, improvement in quality of supply, reliability, metering, reduction in congestion, etc., to the Commission for approval, as a part of the Business Plan:

Provided that in case of non-submission of the Capital Investment plan by the Distribution Licensee for a year of the Control Period, the Commission may disallow the Capital expenditure for that year.

44.2 The Capital Investment Plan shall be a least cost plan for undertaking investments. However, all capital expenditure projects of value exceeding Rs. Ten Crore and must have prior approval of the Commission on quarterly basis, and will be subject to prudence check.

44.3 The Capital Investment Plan shall be accompanied by such information, particulars and documents as may be required including but not limited to the information such as number of distribution sub-stations, consumer sub-stations, transformation capacity in MVA and details of distribution transformers of different capacities, HT:LT ratio as well as distribution line length showing the need for the proposed investments, alternatives considered, cost / benefit analysis and other aspects that may have a bearing on the Tariff for retail supply of electricity and the Wheeling Charges:

Provided that the Distribution Licensee shall submit separate details of Capital Investment Plan for each Distribution Franchisee area within its Licence area.

Unquote

4.7.8 The Commission observed that the Rs. 199.16 Crore has been claimed by the Petitioner for Capital Expenditure in FY 2021-22 for which the Commission vide Deficiency Letter dated January 06, 2023 has sought clarification from the Petitioner and asked to provide the projects/schemes wise capex capitalized in FY 2021-22 vis-à-vis capex approved for FY 2021-22 in the Tariff Order for FY 2021-22 dated August 26, 2021. The Commission has also asked to provide clarification whether the projects /schemes undertaken in FY 2021-22 has been completed or spilled over to next year. The Petition in reply has submitted the following: -

TABLE 4-105: SUMMARY OF PROJECT WISE FIXED ASSETS ADDITIONS IN FY 2021-22

Sl. No.	Particulars	No. of Projects	Minimum Project Cost	Maximum Project Cost	Amount
		No	Rs Crore	Rs Crore	Rs Crore
1	New Connections, Replacement Stock & Metering	76	0.00	4.19	46.81
2	New Connection to Oppo Mobile India Pvt Ltd at 132 kV voltage level	3	0.00	0.00	54.89
3	Substations, Transformers, 33kV, 11 kV & LT Network	42	0.00	7.79	67.74
4	Process System Automation	36	0.00	0.45	2.80
5	IT Projects	15	0.01	5.03	11.05
6	Civil Works & Office Infrastructure Facility	9	0.02	2.43	9.52
7	Tools & Testing Equipment	2	0.05	1.01	1.06
8	Vehicles	NA	-	-	1.58
9	Lease Hold Land	1	-	-	3.70
	Total	-	-	-	**199.16**

4.7.9 The Commission vide deficiency letter dated January 06, 2023 sought whether the Petitioner claim towards purchase of Leasehold Land is capitalised and put to use and also the Petition required to submit cost of construction and other expenses incurred on this Leasehold land and provides line items in Fixed Asset Register (FAR) where these costs have been booked. In reply, the Petitioner submitted that during the FY 2021-22, GNIDA allotted plot measuring 2400 sq. mtr. at Sector-1, Greater Noida for construction of 33/11KV Substation. The registration for the land was done in December 2021 and, therefore, the same was capitalised during FY 2021-22. Accordingly, the Capital Expenditure of Rs. 3.70 Crore incurred during FY 2021-22 comprises the cost of acquisition and registration of the aforesaid land.

4.7.10 In regard to the Petitioner's claim towards capitalisation of land for construction of 33/11kV Substation, the Petitioner submitted that this land will be used in construction of upcoming 33/11 kV Substation. Hence, the Commission disallows the un-utilised land as claimed by the Petitioner. The Petitioner may approach the Commission, when the projects on the corresponding land will be completed and put to use.

4.7.11 Further, the Commission observed that the Petitioner claimed the assets addition for Vehicles as Rs. 1.58 in the MYT Format and FAR for FY 2021-22. However, in the “Additional MYT Format-1” the Petitioner claimed the assets addition for Vehicles as Rs. 0.94 Crore. The Commission vide Deficiency Note Letter dated January 06, 2023 sought clarification from the Petitioner for such discrepancy. In reply, the Petitioner submitted that Rs. 1.58 Cr incurred for Vehicles in FY 2021-22 and shown in FAR for FY 2021-22 as well as in MYT Formats. The details of some vehicles purchased during the year were inadvertently missed in the “Additional MYT Format-1”.

4.7.12 In regard to the addition of Vehicles, the Commission is of the view that the Section 61(d) of Electricity Act, 2003 mandates the “safeguarding of consumers’ interest and at the same time, recovery of cost of electricity in a reasonable manner”. In line to this the Commission has always endeavoured to safeguard the interests of consumers’ & approved ARR of any licensee should include only the necessary & legitimate costs. The fixed assets of licensee & its core business both should be in harmony and necessary because this impacts the various components of ARR i.e., depreciation, ROE and interest on loan and hence the tariff & subsequently the interests of the consumers’. If a licensee makes additions in the fixed assets which are not adding any values to the core business, it impacts the various components of ARR resulting high ACOS & should be disallowed. Further, the Petitioner has failed to justify about the functional utility of the luxury vehicle such as MG Hector, Inovva Crysta, Hyundai Creta, etc. in the business of distribution of electricity. Accordingly, the Commission taking into consideration the views taken in the True Up of FY 2020-21 disallows the claimed towards the GFA addition under the asset class of ‘vehicles’ for FY 2021-22.

4.7.13 Also, the Commission found that in the FAR for FY 2021-22, 132 kV lightening arrester is booked in asset created by the Petitioner, which seems to be an asset of 132kV and above related network. In this regard, the Commission vide Deficiency Note Letter dated January 06, 2023 sought following clarification from the Petitioner:

(i) Details of all other assets capitalised (‘Put to Use’) under 132 kV and above asset and its associated work for FY 2021-22, FY 2022-23 and FY 2023-24;

(ii) Confirm that these assets are owned by NPCL or funded through consumer contribution.

4.7.14 The Petitioner in response to above has submitted no asset of '132KV & above' has been capitalized except 132 kV dedicated line constructed for M/s OPPO Mobile. M/s OPPO Mobiles India Private Limited, situated at Plot No.1, Ecotech-VII, Greater Noida applied for additional connection of 40 MVA with connectivity at 132 kV voltage level. Accordingly, the Petitioner in turn applied to UPPTCL for grant of one bay at 132 kV at 400 kV Grid UPPTCL's Substation at Sec-148 Noida and for construction of dedicated line at 132 kV from the above substation to the plant facility of the consumer at Greater Noida on Deposit Work basis. The entire work is done by UPPTCL against consumer contribution received from M/s Oppo, however, being a distribution licensee, the cost of the 132kV Bay, dedicated line, metering and other associated equipment is capitalized in the books of the Petitioner in FY 2021-22. Accordingly, the cost of Rs. 54.89 Crore is capitalized in FY 2021-22.

4.7.15 Further, the Petitioner submitted that entire amount of Rs. 54.89 Crore has been recovered from the Consumer, therefore, the same has been reduced from the total capital expenditure for calculating the fund requirement, interest on loans, depreciation and return on equity. The 132 KV lightening arrester capitalised in FY 2021-22 is the part of 132 KV dedicated line constructed for M/s OPPO Mobiles India Private Limited and inadvertently has been mentioned under "NPCL Asset" instead of "Consumer Contribution". The Petitioner requested the Commission to ignore such inadvertent error. The Commission considering the Petitioner's reply has reduced the amount attributable to 132 KV Lightening Arrester from the assets addition during the year and added to the consumer contribution for FY 2021-22.

4.7.16 The Commission observed that the Petitioner has claimed Rs.139.48 Crore as Capital Investment Plan for FY 2021-22 in Annexure -23 (Reconciliation of CWIP & Capital Investment Plan) in this regard the Commission vide email dated February 17, 2023 sought reconciliation of the same with the audited accounts and also the details of the notes which are used for reconciliation of this information. In reply the Petitioner submitted the following table:

TABLE 4-106: RECONCILIATION OF CWIP AND CAPITAL INVESTMENT (Rs. Crore)

Particulars	Formula	Amount	Reference in Audited accounts
Addition to Tangible Assets	a	188.35	Note no. 3 on page 30
Addition to Intangible Assets	b	10.81	Note no. 4 on page 32
Less: Salary Capitalized	c	8.98	Note no. 30 on page 45
Sub-Total	**d=a+b-c**	**190.18**	
Add: Closing Capital Work-in-Progress			
Tangible CWIP	e	14.44	Note no. 3 on page 12

Particulars	Formula	Amount	Reference in Audited accounts
Intangible Assets under Development	f	0.02	Note no. 4 on page 12
Capital Advances	g	8.30	Note no. 9 on page 12
Sub-Total	**h=e+f+g**	**22.76**	
Less: Opening Capital work-in-progress			
Tangible CWIP	i	9.17	Note no. 3 on page 12
Intangible Assets under Development	j	7.38	Note no. 4 on page 12
Capital Advances	k	56.91	Note no. 9 on page 12
Sub-Total	**l=i+j+k**	**73.46**	
Total	**m=d+h-l**	**139.48**	

4.7.17 The Commission, with reference to the Regulation 44.2 of the MYT Regulations, 2019, directed the Petitioner, repeatedly, in Tariff Order of previous years that the capital investment plan must be submitted along with the exhibits demonstrating the prior approval of the Commission for the schemes/projects having value greater than Rs. 10 Crore. In this regard, the Petitioner in the instant ARR Petition submitted that the capital investment claimed for FY 2021-22 is only towards the projects/schemes having value less than Rs. 10 Crore. Further, the Commission in TVS MoM vide email dated February 17, 2023 sought reconciliation of Scheme/ Project wise capitalization, capital work in progress and capital investment plan of the audited accounts for FY 2021-22 with the proposed Capex in ARR/ Tariff Order for FY 2021-22. In reply, the Petitioner resubmit the work wise capital expenditure plan for FY 2021-22, which is not found satisfactory by the Commission. The Commission directs to Petitioner that in the future Tariff filings the details of Scheme/Project wise physical and financial progress should also be submitted along the Capital Investment Plant for the audited year.

The relevant Regulations related to approval of capital Investment Plan is as follow:

Quote

4.2 The Capital Investment Plan shall be a least cost plan for undertaking investments. However, all capital expenditure projects of value exceeding Rs. Ten Crore and must have prior approval of the Commission on quarterly basis, and will be subject to prudence check.

Unquote

4.7.18 The Commission, from time to time, in its Tariff Orders has repeatedly directed the

Petitioner to submit the capital investment plan and take prior approval of the schemes/projects greater than Rs. 10 Crore in accordance with the MYT Regulations. 2019.

4.7.19 Although the Petitioner submitted that the claimed capex is only towards the projects/schemes with value less than Rs. 10 Crore, however, in the Fixed Asset Register (FAR) submitted by Petitioner, the Commission found that the total addition towards 11 kV Network Development is Rs. 21.26 Crore. Therefore, the Commission is convinced that there must be projects/schemes which are more than the stipulated cap of Rs. 10 Crore but have been broken down by Petitioner to escape the cap. Since, the Petitioner has not taken prior approval of the Commission for any of the schemes with capital expenditure more than Rs. 10 Crore accordingly, the Commission has decided to disallow 25% of the GFA addition under each asset class other than vehicles, as claimed for FY 2021-22.

TABLE 4-107: NET IMPACT OF DISALLOWANCE CONSIDERED IN GFA FOR FY 2021-22 (Rs. Crore)

Particulars	Ref.	Amount
Addition / Capitalization (Claimed during the year)	A	199.16
Less: Disallowance of the capitalization towards land transfer from GNIDA	B	3.70
Less: Disallowance of Vehicle in FY 2021-22	C	1.58
Less: Shifting of capex toward 132 KV Lighting Arrestor to consumer contribution	D	0.05
Less: Consumer Contribution for FY 2021-22	E	78.79
Assets without Consumer Contribution	F=A-B-C-D-E	115.04
Disallowance of remaining assets (25%)	G=F*25%	28.76
Net addition/ Capitalization (Considered during the year including CC)	H=A-(B+C+G)	165.12
Less: Deletion of Assets	I	9.72
Net Capitalization	J=H-(I+E+D)	76.56
Debt @ 70%	K=(J)*70%	53.59
Equity @ 30%	L=(J)*30%	22.97

4.7.20 The Commission has considered the closing gross fixed assets for FY 2020-21 approved in the Tariff Order for FY 2022-23 dated July 20, 2022 as opening gross fixed assets for FY 2021-22. Accordingly, based on the capex addition during the year the closing of the gross fixed assets for FY 2021-22 is shown in the table below: -

TABLE 4-108: GFA AFTER DISALLOWANCE OF VEHICLES FOR FY 2021-22 (Rs. Crore)

Particulars	FY 2021-22		
	Tariff Order for FY 2021-22 dated August 26, 2021	Claimed in Petition	Approved Upon Truing Up
Opening GFA	1439.98	1777.33	1350.31
Addition during the year	239.71	199.16	165.12

Particulars	FY 2021-22		
	Tariff Order for FY 2021-22 dated August 26, 2021	Claimed in Petition	Approved Upon Truing Up
Retirement during the year	6.65	10.44	9.72*
Closing GFA	1673.04	1966.05	1505.71

** Decapitalization of Rs. 0.72 Crore of vehicle is not considered as there is no GFA towards vehicle in Opening GFA of FY 2021-22.*

4.7.21 The Commission vide deficiency letter dated January 06, 2023 sought CWIP table for FY 2021-22 in MS-Excel format with proper formulae and linkage in reply the Petitioner submitted the following table:

TABLE 4-109: ITEM-WISE DETAILS OF CWIP SUBMITTED BY THE PETITIONER FOR FY 2021-22 (Rs Crore)

Sl No.	Scheme	True-up: FY 2021-22			
		Opening CWIP	Addition in CWIP	Capitalisation	Closing CWIP
1	Distribution Management System Project	0.10	3.58	-	3.68
2	Survillance & Safety System Project	0.02	0.00	-	0.02
3	SAP Hana Project	7.38	-	7.38	-
4	Consultancy Service for preparation of DPR and Tender Document for construction of 220KV Substation and Associated 220kV Lines at BZP and KP5, Greater Noida	1.28	-	-	1.28
5	Materials for various Capital Projects	7.77	9.48	7.77	9.48
6	Advance for 1 no. 33kV Bay	0.33	-	0.33	-
7	Advance for providing one bay at 132 kV at 400 kV Substation at Sec-148 Noida of UPPTCL and construction of dedicated line from the above substation to the plant facility of the consumer viz. M/s OPPO , Greater Noida **paid against consumer contribution**	54.66	-	54.66	-
8	Application Money paid to GNIDA for allotment of Lands for construction of 33/11 kV Substations and Other facilities.	1.03	1.52	-	2.55
9	Advance for NIDP, NTT etc.	-	5.09	-	5.09
10	Other Advances	0.89	-	0.22	0.67
	Total	**73.46**	**19.67**	**70.37**	**22.76**

4.8 INTEREST AND FINANCE CHARGE

4.8.1 The Petitioner submitted that the Interest and Finance Charges covers the following cost elements:

a) Interest on Long Term Loans

b) Interest on Working Capital

c) Interest on Security Deposits

4.8.2 These components are discussed in detail in subsequent paragraphs:

4.9 INTEREST ON LONG TERM LOANS

Petitioner's Submission

4.9.1 The Petitioner submitted that the Commission in Tariff Order dated August 26, 2021 has approved the interest on term loan at Rs. 45.36 Crore based on additional debt requirement of Rs. 84.39 Crore for FY 2021-22. Further, the Petitioner submitted that Regulation 20.2 and Regulation 23.2 provides methodology for determination of Opening Debt and Equity for the Control Period. The relevant extract of the aforesaid Regulations is reproduced below:

Quote

20.2 In case of the Licensee, for the fixed assets capitalised on account of Capital Expenditure Scheme prior to April 1, 2020, ***the debt-equity ratio allowed by the Commission for determination of ARR / Tariff for the period ending March 31, 2020 shall be considered***

Provided that in case of retirement or replacement or de-capitalisation of the assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of such assets:

Provided further that in case of retirement or replacement or de-capitalisation of the assets, the debt capital approved as mentioned above, shall be reduced to the extent of outstanding debt component based on documentary evidence, or the normative loan component, as the case may be, of the original cost of such assets

23.2 The normative long- term loan outstanding as on April 1, 2020, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2020, from the gross normative loan.

Unquote

4.9.2 The Petitioner also submitted that based on the above said Regulations, the Debt and Equity at end of FY 2019-20 shall be considered as Opening Debt and Equity for FY 2020-21. Further, the Petitioner had filed appeals against the Tariff Orders dated December 4, 2020 and August 26, 2021 before the Hon'ble APTEL, therefore the

Petitioner has considered the opening balances of Debt and Equity as per its True-up Petition / submission for determination of Interest on Term Loan for FY 2021-22.

4.9.3 Based on actual net capital expenditure of Rs. 109.05 Crore and Rs. 140.20 Crore for FY 2018-19 and FY 2019-20 respectively as well as stipulated debt equity of 70:30, the opening normative net debt for FY 2020-21 works out to Rs. 511.54 Crore. The Petitioner further submitted that based on the actual net capital expenditure of Rs. 77.16 Crore for FY 2020-21 and stipulated debt equity of 70:30, the opening normative net debt for FY 2021-22 works out to Rs. 515.07 Crore.

4.9.4 The Petitioner submitted the summary of interest on Term Loan (normative) for FY 2021-22 based on above referred Opening Debt and Additional Debt Requirement of Rs. 76.95 Crore for FY 2021-22 is given below:

TABLE 4-110: COMPUTATION OF INTEREST ON TERM LOAN FOR FY 2021-22
(Rs. Crore)

Sl. No.	Loan Computation	Ref.	Approved	Actual
1	Net Normative loan – Opening	A	438.43	515.07
2	Increase/Decrease due to ACE during the Year	B	84.39	76.95
3	Repayments of Normative Loan during the year	C	46.12	56.37
4	Net Normative loan – Closing	d=a+b-c	476.70	535.65
5	Average Normative Loan	e=(a+d)/2	457.57	525.36
6	Weighted average Rate of Interest on actual Loans	F	9.91%	9.91%
7	Interest on Normative loan	g=e x f	45.36	52.07

4.9.5 The Petitioner submitted that the repayment of Normative Term Loans has been considered as equivalent to depreciation being computed in accordance with Regulation 23 of the MYT Regulation, 2019. Relevant extract of the said Regulation is reproduced below:
Quote

23.5 The rate of interest shall be the weighted average rate of interest computed on the basis of the actual long- term loan portfolio at the beginning of each year:

Provided that at the time of Truing- Up, the weighted average rate of interest of the actual long- term loan portfolio during the concerned year shall be considered as the rate of interest:

Provided further that if there is no actual long- term loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest for actual loan shall be considered.

Unquote

4.9.6 The Petitioner submitted that they do not have any actual Term Loan outstanding during FY 2021-22, therefore in accordance with above regulation, the last available weighted average rate of interest for the term loan has been considered for determination of normative interest on the term loans for FY 2021-22. The Petitioner therefore submitted that the normative interest on Term Loan is Rs. 52.07 Crore for True-up ARR of FY 2021-22 and requested the Commission for the approval of the same.

Commission's Analysis

4.9.7 The Commission has considered debt equity ratio for the assets capitalized as 70:30 in line with MYT Regulations, 2019. In case, the equity is less than 30%, the actual equity shall be considered and if equity is more than 30%, the amount of equity shall be limited to 30%. Therefore, the balance asset capitalized shall be treated as normative loan for determination of tariff. The same approach was considered for approval of ARR in its previous Tariff Orders. The relevant extract of MYT Regulations, 2019 is reproduced below:

Quote

23 Interest on Long- Term Loan

23.1 The long- term loans arrived at in the manner indicated in these Regulations on the assets put to use shall be considered as gross normative loan for calculation of interest on loan:

Provided that in case of retirement or replacement or de-capitalisation of assets, the loan capital approved as mentioned above, shall be reduced to the extent of outstanding loan component of the original cost of such assets based on documentary evidence.

23.2 The normative long- term loan outstanding as on April 1, 2020, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2020, from the gross normative loan.

23.3 The repayment for each year shall be deemed to be equal to the Depreciation allowed for that year.

23.4 Notwithstanding any moratorium period availed, the repayment of loan shall be considered from the first year of commercial operation of the asset.

23.5 The rate of interest shall be the weighted average rate of interest computed on the basis of the actual long- term loan portfolio at the beginning of each year:

Provided that at the time of Truing- Up, the weighted average rate of interest of the actual long- term loan portfolio during the concerned year shall be considered as the rate of interest:

Provided further that if there is no actual long- term loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest for actual loan shall be considered:

Provided also that if the Licensee, does not have actual long- term loan even in the past, the weighted average rate of interest of its other businesses regulated by the Commission shall be considered:

Provided also that if the Licensee does not have actual long- term loan, and its other businesses regulated by the Commission also do not have actual loan even in the past, then the weighted average rate of interest of the entity as a whole shall be considered:

Provided also that if the entity as a whole does not have actual long-term loan because of which interest rate is not available, then the rate of interest for the purpose of allowing the interest on the normative long- term loan should be the weighted average SBI MCLR (1 Year) prevailing during the concerned year.

23.6 The interest on long- term loan shall be computed on the normative average long- term loan of the year by applying the weighted average rate of interest:

Provided that at the time of Truing-Up, the normative average loan of the concerned year shall be considered on the basis of the actual asset capitalisation approved by the Commission for the year.

23.7 The excess interest during construction on account of time and / or cost overrun as compared to the approved completion schedule and capital cost or on account of excess drawal of the debt funds disproportionate to the actual requirement based on Scheme completion status, shall be allowed or disallowed partly or fully on a case to case basis, after prudence check by the Commission:

Provided that where the excess interest during construction is on account of delay attributable to an agency or contractor or supplier engaged by the Licensee, any liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost:

Provided further that the extent of liquidated damages to be considered shall depend on the amount of excess interest during construction that has been allowed by the Commission.

Unquote

4.9.8 The closing balance of normative loans of FY 2020-21 as approved by the Commission in the Tariff Order dated July 20, 2022 has been considered as opening normative loans as on April 1, 2021. Further, 70% of approved asset capitalised (net off deduction / de-capitalization and consumer contribution) has been considered as normative loan addition during the year.

4.9.9 The Commission observed that the Petitioner has claimed the normative opening loan for FY 2021-22 as Rs. 515.07 Crore, which is neither matching with the approved Trued Up closing value for FY 2020-21 nor equivalent to the earlier submission of the Petitioner (closing value for FY 2020-21). The Commission vide deficiency letter dated January 06, 2023 sought the basis and computation for opening value. The Petitioner, in its reply submitted that the Commission in Truing Up of ARR for FY 2020-21 vide

Tariff Order dated July 20, 2022 has adopted methodology which is different from the methodology followed by the Commission in Truing up of ARR for FY 2019-20. Accordingly, based on the changed methodology as followed by the Commission, the Petitioner has restated Debt balance for FY 2020-21 as shown in table below:

TABLE 4-111: SUMMARY OF DEBTS SUBMITTED BY PETITIONER FOR FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	Reference	FY 2020-21 (True up)	
			As per Old Methodology	As per revised Methodology
1	**Assets Put to use during the year**	**a**	**100.19**	**100.19**
2	Add: Closing CWIP	b	73.46	0.00
3	Less: Opening CWIP	c	(22.93)	0.00
4	Less: Assets Retired	d	(3.06)	(3.06)
5	**Capital Expenditure (Capex) during the year**	**e=a+b-c-d**	**147.67**	**97.13**
6	Less: Capital Contribution from Consumers	f	19.97	19.97
7	**Net Capital Expenditure**	**g=e-f**	**127.70**	**77.16**
8	Addition to Debts for FY 2020-21	h=g x 70%	89.39	54.01
9	Add: Opening Debt for FY 2020-21	j	511.54	511.54
10	Less: Depreciation (being Repayment)	k	(49.95)	(50.48)
11	**Closing Debt for FY 2020-21**	l=h+j-k	**550.97**	**515.07**

4.9.10 The portion financed through Consumer Contributions has been separated as the depreciation on the same would not be charged to the consumers. Further, the allowable depreciation for the year has been considered for normative loan repayment. Since there is no actual loan, the interest rate allowed is considered as allowed by the Commission in True-Up of ARR for FY 2020-21.

TABLE 4-112: INTEREST ON LONG TERM LOAN FOR NPCL FOR FY 2021-22 (Rs. Crore)

Particulars	Ref	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated August 26, 2021	Claimed in Petition	Approved Upon Truing Up
Opening Balance of Normative Loan	A	438.43	515.07	380.83
Net Increase/Decrease due to ACE during the Year (70% of Net GFA Addition after deducting Consumer contribution and asset deletion)	B	84.39	76.95	53.59
Repayment of Normative loan during the year	C	46.12	56.37	38.73
Closing Balance of Normative Loan	D=A+B-C	476.70	535.65	395.70
Average Balance of Normative Loan	E=A+D/2		525.36	388.26
Weighted average Rate of Interest on actual Loans (%)	F	9.91%	9.91%	9.91%
Interest on long term loan	**G=E*F**	**45.36**	**52.07**	**38.48**

4.10 INTEREST ON WORKING CAPITAL

Petitioner's Submission

4.10.1 The Petitioner submitted that Regulation 25.2 of the MYT Regulations, 2019 provides methodology for determination of Working Capital for the Control Period. The relevant extract of the aforesaid Regulations is reproduced below:

Quote

25.2 Distribution Business

(a) The working capital requirement of the Distribution Business shall cover:

(i) Operation and maintenance expenses for one month;

(ii) Maintenance spares at 40% of the R&M expenses for two months; and

(iii) One and half month equivalent of the expected revenue from charges for use of Distribution system at the prevailing Tariff (excluding Electricity Duty);

Minus

(iv) Amount held as security deposits from Distribution System Users:

Provided that for the purpose of Truing-Up for any year, the working capital requirement shall be re-computed on the basis of the values of components of working capital approved by the Commission in the Truing-Up.

Unquote

4.10.2 The Petitioner submitted further that as per the UP Electricity Supply Code, 2005 (as amended), the power supply bill for a month (30/31 days) needs to be raised within next 7 days with 15 days period (due date) for payment of the same. Thereafter, the Distribution Licensee must wait for another 15 days period before disconnecting supply of power in case of non-payment (disconnection date). Thus, it would take almost 67 days for a Distribution Licensee to recover payment of its electricity bills, assuming all the consumers pay their bills in-time. However, the MYT Regulations, 2019 considers debtors equivalent to 45 days only while the in MYT Regulations 2014, debtors equivalent to two months (60 days) of the expected revenue were considered as a part of the working capital requirement. Therefore, the reduction of receivables from two months to one and half months is inadequate and is also not in sync with the payment cycle as per the provisions of Electricity Supply Code, 2005.

4.10.3 The Petitioner also submitted that the Commission in Tariff Order dated August 26, 2021 has not considered the Electricity Duty as part of Receivables, thereby, reduction in Working Capital amount leads to disallowance of interest on working capital. The Commission observed in the above Order as follows:

Quote

3.12.11 The Commission is of the view that the UPERC (MYT for Distribution Tariff) Regulations, 2014 provides for only revenue for two months and not the electricity duty. The Commission allowed Electricity duty in IoWC for FY 2017-18 under the same regulation inadvertently. The Commission is not inclined to conduct the True Up of the True Up of FY 2017-18 and so for True-Up of FY 2018-19 wherein the Electricity duty would not be considered while determining revenue for two months. Also, Electricity Duty is the domain of GoUP and is not a part of the ARR or Revenue of the Petitioner in its regulatory accounts.

Unquote

4.10.4 The Petitioner also submitted that the Commission refers to the Section 4A of the U. P. Electricity (Duty) Act, 1952, which provides as follow:

Quote

4-A. Reimbursement of electricity duty from consumers

……….

(2) For the purpose of recovering the amount of electricity duty from the consumer, the licensee or the appointed authority, as the case may be, may without prejudice to any other mode of recovery, exercise the power conferred on the licensee under sub-section (1) of the Section 24 of the Indian Electricity Act, 1910 (Act no, IX of 1910), as if the duty were a charge or sum due in respect of energy supplied to such consumer. ……….

Unquote

4.10.5 The Petitioner submitted that as per above provisions of the Section 4A of the U. P. Electricity (Duty) Act, 1952, the Electricity Duty is considered at par with the charges for energy supplied to a consumer and therefore, the Electricity Duty is billed by the Petitioner to the consumers along with the other charges for electricity. Therefore, the same is an integral part of the revenue and receivables of the Petitioner.

4.10.6 The Petitioner submitted that disallowance of working capital interest by not considering Electricity Duty as part of Receivables is against the commercial principles, the provisions of The Electricity (Duty) Act, 1952 as well as Commission's own earlier practice.

4.10.7 The Petitioner in accordance to the above submitted the computation of interest on working capital for FY 2021-22 as shown below:

Table 4-113: INTEREST ON WORKING CAPITAL FOR FY 2021-22

Particulars	Ref	Approved	Claimed in True Up
O&M expenses for 1 month	a	6.24	10.90
One and half month equivalent of expected revenue from distribution tariff	b	256.13	253.93
Maintenance spares @ 40% of the R&M Expense for 2 Months	c	2.61	5.13
Gross Total	d=a+b+c	264.98	269.96
Security Deposits from Consumers			
Opening Balance	e	270.11	274.48
Received during the year (Net of Refunds)	f	14.11	15.47
Closing Balance	g=e+f	284.53	289.96
Average Security Deposit	h=(e+g)/2	277.32	282.22
Security Deposit with UPPCL	I	11.28	11.28
Net Security Deposits from Consumers	j=h-i	266.04	270.94
Net Working Capital	k=d-j	-	-
Applicable Rate of Interest for Working Capital (SBI - 1Year MCLR + 2.50%)	l	10.65%	9.50%
Interest on Total Working Capital	m=k*l	-	-

4.10.8 The Petitioner submitted that as per the practice followed by the Commission in Tariff Orders dated August 26, 2021, the security deposit of Rs. 11.28 Crore passed on to UPPCL till FY 2005-06 in accordance with past arrangement, has been deducted from the total Security Deposit available with the Petitioner while computing working capital requirement as the same are not available at the disposal of the Petitioner for meeting its working capital requirements. The Petitioner also submitted that the above table does not include the amount of Rs. 10.00 Crore paid to UPPCL based on the Orders of Commission and Hon'ble Allahabad High Court in FY 2006-07 in the matter of providing 10 MVA additional power by UPPCL.

4.1.1 **Commission's Analysis**

4.10.9 The Commission as per the provisions specified under the Regulation 25.2 of MYT Regulations, 2019, calculated the working capital to approve the interest of working capital for FY 2021-22. The aforesaid regulation stipulates that the revenue for one and half months shall be considered for assessing the working capital and such revenue shall exclude Electricity duty. The relevant extract of the regulations is reproduced below:

Quote

25.2 Distribution Business

(a) The working capital requirement of the Distribution Business shall cover:

(i) Operation and maintenance expenses for one month;

(ii) Maintenance spares at 40% of the R&M expenses for two months; and

(iii) One and half month equivalent of the expected revenue from charges for use of Distribution system at the prevailing Tariff (excluding Electricity Duty);

Minus

(iv) Amount held as security deposits from Distribution System Users:

Provided that for the purpose of Truing-Up for any year, the working capital requirement shall be re-computed on the basis of the values of components of working capital approved by the Commission in the Truing-Up.

(b) Rate of interest on working capital shall be simple interest and shall be equal to the SBI MCLR (1 Year) on October 01, 2019 plus 250 basis points:

Provided that for the purpose of Truing-Up for any year, simple interest on working capital shall be allowed at a rate equal to the weighted average SBI MCLR (1 Year) prevailing during the concerned Year plus 250 basis points.

(c) Interest shall be allowed on consumer security deposits as per the provisions of the Electricity Supply Code, 2005 and its subsequent amendments/ addendums and the new Regulations made after repeal of the same.

Unquote

4.10.10 Further, the Electricity duty is the domain of GoUP and is not a part of ARR or Revenue Requirement for the Petitioner in the regulatory accounts. Therefore, the

Commission considered the revenue for FY 2021-22 net of Electricity Duty for the purpose of computation of interest on working capital.

4.10.11 As per the aforesaid provisions, the Commission for the purpose of computing Interest on Working Capital for FY 2021-22 considered the SBI MCLR (1 Year) plus 250 basis point i.e., 9.50%. (Source: https://www.sbi.co.in/web/interest-rates/interest-rates/mclr-historical-data).

4.10.12 The Commission has worked out the Working Capital and Interest on Working Capital for FY 2021-22 as given in table below:

Table 4-114: INTEREST ON WORKING CAPITAL AS APPROVED BY THE COMMISSION FOR FY 2021-22 (Rs. Crore)

Particulars	FY 2021-22 (True up)		
	Tariff Order for FY 2021-22 dated August 26, 2021	Claimed in Petition	Approved Upon Truing Up
One month's O&M Expenses	6.24	10.74	6.74
Maintenance spares @ 40% of R&M expenses for two months	2.61	5.13	2.88
One and half month equivalent of the expected revenue from charges for use of Distribution systems at the prevailing Tariff (excluding electricity duty)	256.13	253.93	242.46
Gross Total	**264.98**	**269.80**	**252.08**
Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	-	-	-
Opening Balance	270.11	274.48	274.48
Received during the year	14.41	15.47	15.47
Closing Balance	284.53	289.95	289.96
Less: Security Deposit with UPPCL	11.28	11.28	11.28
Net Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	266.04	270.94	270.94
Net Working Capital	(1.06)	(1.14)	(18.86)
Rate of Interest for Working Capital	10.65%	9.50%	9.50%
Interest on Total Working Capital	**0.00**	**0.00**	**0.00**

4.11 INTEREST ON CONSUMER SECURITY DEPOSITS

Petitioner's Submission

4.11.1 The Petitioner submitted that Regulation 25.2(c) of the MYT Regulations, 2019 provides that the licensee shall pay interest equivalent to the bank rate or more on the consumer security deposits, as may be specified by the Commission. The Commission vide Tariff Order dated August 26, 2021 approved the Interest on Security Deposit @ 4.25% per annum being RBI's Bank Rate prevailing on the April 01, 2021. The Petitioner further added that actual interest on consumer security deposit for FY

2021-22 is computed on the basis of each individual customer's outstanding security deposit on daily balance basis and the tenure, which works out to be Rs. 12.23 Crore as summarized in Table below:

TABLE 4-115: INTEREST ON SECURITY DEPOSIT SUBMITTED BY PETITIONER FOR FY 2021-22 (Rs. Crore)

Particulars	Reference	Approved	Claimed in True Up
Opening Balance of Security Deposit	A	270.11	274.48
Addition During the year	B	14.41	15.48
Closing Balance for Security Deposit	c=a+b	284.53	289.96
Average Balance for Security Deposit	d=(a+c)/2	277.32	282.22
Rate of Interest	E	4.25%	4.25%
Interest payable on Security Deposit	f = d x e	11.79	12.23

4.11.2 The Petitioner submit that the interest on consumer security deposit is computed on outstanding balance of each individual customer for the period during which their security deposit was available with the Company and such computation is done in the ERP System of the Company (viz. SAP) automatically without any human intervention. Hence, the computation of interest on the basis of average Consumer Security Deposit might not tally with the amount of interest on Security deposit actually paid. Further, the aforesaid interest on security deposit has been duly audited by the Statutory Auditors of the Company with respect to its provision and computation and requested the Commission to consider the interest on security deposit actually paid to consumers.

Commission's Analysis

4.11.3 The Commission as per the Regulation 25.2 of Distribution Business of UPERC (Multi Year Tariff for Distribution and Transmission) Regulations, 2019 computed the interest on the consumer security deposit. The relevant exact of the aforesaid regulations is reproduced below:

Quote

Interest shall be allowed on consumer security deposits as per the provisions of the Electricity Supply Code, 2005 and its subsequent amendments/ addendums and the new Regulations made after repeal of the same.

Unquote

4.11.4 The Commission observed that the net addition in consumer security deposit during the year submitted by the Petitioner in the additional MYT Format-1 is more than the amount shown in the Audited Accounts for FY 2021-22. The Commission vide deficiency letter dated January 06, 2023 has sought clarification and reconciliation on this account from the Petitioner. In reply, the Petitioner submitted that there was an inadvertent error in calculation of addition in consumer security deposits during the year for FY 2021-22 shown in additional MYT Format-1 and requested to consider the amount submitted in Form-38 of MYT Formats. The Petitioner has revised the Additional MYT Format-1 and the same is shown in table below:

TABLE 4-116: MONTHLY DETAILS OF CSD FOR TRUE-UP YEAR FOR FY 2021-22 (Rs. Crore)

Particular	Apr'21	May'21	Jun'21	Jul'21	Aug'21	Sep'21	Oct'21	Nov'21	Dec'21	Jan'22	Feb'22	Mar'22	Amount (Rs. Cr.)
Opening Balance	274.48	274.63	274.66	275.28	277.14	277.88	283.07	284.33	289.87	290.16	290.96	292.49	274.48
Addition during the month	0.16	0.03	0.69	2.08	7.16	5.31	1.47	6.64	0.66	1.09	2.33	1.15	28.78
Deduction during the month	0.02	-	0.07	0.21	6.42	0.12	0.21	1.10	0.38	0.30	0.80	3.68	13.31
Closing balance	**274.63**	**274.66**	**275.28**	**277.14**	**277.88**	**283.07**	**284.33**	**289.87**	**290.16**	**290.96**	**292.49**	**289.96**	**289.96**
Interest Rate (%)	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	
Interest on Security Deposit to be disbursed by the Licensee as per Regulations	**0.99**	**1.00**	**1.00**	**1.01**	**1.01**	**1.01**	**1.03**	**1.03**	**1.03**	**1.03**	**1.04**	**1.05**	**12.23**
Interest on Security Deposit actually disbursed to the Consumers	**0.99**	**1.00**	**1.00**	**1.01**	**1.01**	**1.01**	**1.03**	**1.03**	**1.03**	**1.03**	**1.04**	**1.05**	**12.23**
Difference to be disbursed	-	-	-	-	-	-	-	-	-	-	-	-	-

4.11.5 The Commission based on the MYT Regulations, 2019 and the submission given by the Petitioner approve the interest on consumer security deposits as shown in the table below:

TABLE 4-117: INTEREST ON CONSUMER SECURITY DEPOSIT APPROVED BY THE COMMISSION FOR FY 2021-22 (Rs. Crore)

Particulars	Approved in TO dated 26.08.2021	Claimed in Petition	Approved Upon Truing Up
Interest payable on Security Deposit	11.79	12.23	12.23

4.11.6 The summary of Interest Charges Trued-Up by the Commission for FY 2021-22 is given in the Table below:

TABLE 4-118: TOTAL INTEREST & FINANCE CHARGES APPROVED BY THE COMMISSION FOR FY 2021-22 (Rs. Crore)

Particulars	Tariff Order for FY 2021-22 dated August 26, 2021	Claimed in Petition	Approved Upon Truing Up
Interest on Long term loans	45.36	52.07	38.48
Interest on short term loans/working capital	0.00	0.00	0.00
Interest on security deposit	11.79	12.23	12.23
Total Interest & Finance charges	**57.14**	**64.30**	**50.70**

4.12 GROSS FIXED ASSETS (GFA) AND DEPRECIATION

Petitioner's Submission

4.12.1 The Petitioner submitted that in accordance with the Capital Expenditure submitted in the Petition, the Petitioner has commutated the GFA as given below for approval of the Commission as shown below: -

TABLE 4-119: GROSS FIXED ASSETS FOR FY 2021-22 (Rs. Crore)

Sl. No.	Description	Approved	Actual		
			GFA till 01.04.2020	GFA added after 01.04.2020	Closing GFA FY 2021-22
1	Opening Balance	1,439.98	1,677.14#	100.19	1,777.33
2	Addition during the Year	239.71	-	199.16	199.16
3	Retirement during the Year	6.65	10.44	-	10.44
4	Closing Balance	1,673.04	1,666.70	299.36	1,966.05
Note: Excluding assets taken over from GNIDA & DMIC etc. *# As per Company's True-up Petitions / submissions*					

4.12.2 The Petitioner submitted that the above said GFA does not include the assets handed over by Other agencies such as GNIDA, UPSIDC, DMIC and other state agencies for distribution of electricity to its consumers and maintenance thereof.

4.12.3 Further, the Commission vide its Tariff Order dated December 04, 2020 had directed the Petitioner to maintain separate individual asset wise FAR for assets capitalised after 01.04.2020 so that the Gross Block and Depreciation may be computed separately for Gross Block before 01.04.2020. In this respect, the Petitioner maintains its Fixed Asset Register in renowned SAP -ERP system. The details of each individual fixed asset have been entered into the SAP-ERP and the applicable Depreciation Rate, Method & Extent as provided in MYT Regulations, 2014 and MYT Regulation, 2019 been defined as parameter in the SAP- ERP. Hence, the Depreciation is computed by the SAP-ERP system strictly as per the rates and method defined in UPERC Multi Year Tariff Regulations, 2019 upto the maximum limit of 90%. The SAP-ERP generates the FAR comprising the Gross Block, Date of Acquisition, Rate of Depreciation, Addition to Gross Block, Assets Retired, Depreciation for the year, Accumulated Depreciation etc. The Petitioner prepares its accounting statement on the basis of such system generated FAR only. The depreciation so arrived at, is being sample checked manually for accuracy. Thus, the Depreciation is computed by SAP-ERP on the basis of defined parameters which meets the direction of the Commission for separate computation of Depreciation on Gross Block. Based on the above GFA, the Petitioner submitted the summary of Depreciation in the table below: -

TABLE 4-120: DEPRECIATION FOR FY 2021-22 (Rs. Crore)

Sl. No.	Description	Ref	Approved	Actual
1	Depreciation on Gross Block till 01.04.2020	a	56.73	54.55
2	Depreciation on Gross Block after 01.04.2020	b		13.69
3	Gross Depreciation for the Year	c=a+b	56.73	68.24
4	Less: Depreciation on Consumer Contribution	d	10.61	11.87
5	Total	e=c-d	46.12	56.37
6	Average GFA	f	1,556.51	1,871.69
7	Weighted Average Depreciation Rate	g=e/f	3.64%	3.65%

4.12.4 The Petitioner has considered the depreciation at the rates as prescribed in Annexure-A of the MYT Tariff Regulation, 2019 on SLM method for finalization of its Accounting Statements for FY 2021-22. The above-mentioned depreciation of Rs. 68.24 Crore may not tally with the depreciation amount as shown in Accounting Statements for FY 2021-22 as the same has been computed as per the methodology followed by the Commission in its tariff order dated August 26, 2021 with GFA bases as per the Petitioner's submissions for Truing up and requested the Commission to approve the depreciation expenses as computed above for FY 2021-22.

Commission's Analysis:

4.12.5 The Commission has approved the GFA for FY 2021-22 as discussed in Capital Expenditure section for truing-up and the same is shown below:

TABLE 4-121: GROSS FIXED ASSETS AS APPROVED BY THE COMMISSION FOR TRUE-UP FOR FY 2021-22 (Rs. Crore)

Particulars	FY 2021-22		
	Tariff Order for FY 2021-22 dated August 26, 2021	Claimed in Petition	Approved Upon Truing Up
Opening GFA	1439.98	1777.33	1350.31
Addition during the year	239.71	199.16	165.12
Retirement during the year	6.65	10.44	9.72*
Closing GFA	1673.04	1966.05	1505.71

** Decapitalization of Rs. 0.72 Crore of vehicle is not considered as there is no GFA towards vehicle in opening of FY 2021-22.*

4.13 DEPRECIATION

Commission's Analysis:

4.13.1 The Commission as per the provisions stipulated under the Regulation 21 of the MYT Regulations, 2019 has calculated the Depreciation for FY 2021-22. The relevant extract of the aforesaid Regulation is reproduced below:

Quote

21 Depreciation:

21.1 The Licensee, shall be permitted to recover Depreciation on the value of fixed assets used in their respective businesses, computed in the following manner:

a) The approved original cost of the fixed assets shall be the value base for calculation of Depreciation:

Provided that the Depreciation shall be allowed on the entire capitalised amount of the new assets after reducing the approved original cost of the retired or replaced or decapitalised assets.

b) Depreciation shall be computed annually based on the Straight- Line Method at the rates stipulated in the Annexure- A of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019.

Provided that the Licensee shall ensure that once the individual asset is depreciated to the extent of seventy percent, remaining depreciable value as on 31st March of the year closing shall be spread over the balance Useful Life of the asset including the Extended Life, as per submission of the Licensee and approved by the Commission.

c) The salvage value of the asset shall be considered at 10% of the allowable capital cost and Depreciation shall be allowed up to a maximum of 90% of the allowable capital cost of the asset:

Provided that land owned shall not be treated as a Depreciable asset and shall be excluded while computing Depreciation:

Provided further that Depreciation shall be chargeable from the first year of commercial operation.

d) Depreciation shall not be allowed on assets funded by Consumer Contributions or Subsidies/ Grants/ Deposit works.

21.2 In case of existing assets, the balance depreciable value as on April 01, 2020, shall be worked out taking into consideration the life of the asset, and by deducting the cumulative Depreciation as admitted by the Commission up to March 31, 2020, from the gross depreciable value of the assets.

21.3 In case of projected commercial operation of the assets for part of the year, depreciation shall be computed based on the average of opening and closing value of assets.

21.4 Depreciation shall be re-computed for assets capitalised at the time of Truing-Up, based on Audited Accounts and documentary evidence of assets capitalised by the Petitioner, subject to the prudence check of the Commission.

Unquote

4.13.2 The Commission directed the Petitioner to maintain a separate individual asset wise FAR for assets capitalized after April 01, 2020 and the Gross Block and Depreciation may be computed separately from the Gross Block before April 01, 2020. Accordingly, from FY 2020-21 onwards the Petitioner has maintained two separate Gross Blocks (one for assets upto March 31, 2020 (Part-A) and second for assets after April 01, 2020 (Part B) and two separate FAR's depicting addition of Assets details from April 01, 2020 onwards for the purpose of depreciation computation.

4.13.3 In compliance to above, the Petitioner submitted gross depreciation separately for Part-A & Part-B and combined them later to derive the gross depreciation for FY 2021-22. The Petitioner has not considered the opening Gross Block for Part-A & Part-B as per the closing gross bock approved in True-Up of ARR for FY 2020-21 in Tariff Order dated July 20, 2022. Thus, the Commission for the purpose of calculating the depreciation, has considered the opening Gross block for Part-A & Part-B as approved closing Gross Block for FY 2020-21 in Tariff Order dated July 20, 2022.

4.13.4 The Commission observed that the Petitioner claimed the deduction in assets as Rs. 10.44 Crore for FY 2021-22, whereas in the Format F30 (Depreciation) the same has been considered as Rs. 3.79 Crore. The Commission vide deficiency letter dated January 06, 2023 has sought clarification and reconciliation for the same from the Petitioner. In reply, the Petitioner submitted that the Commission in its Tariff Order dated July 20, 2022, while determining the depreciation for Truing-up of FY 2020-21 considered the Written Down Value of Fixed Assets as on March 31, 2020 (i.e. Closing WDV of FY 2019-20) as the Opening Gross Fixed Assets as on April 01, 2020 (i.e. Opening GFA of FY 2020-21). Thus, in this process, for the purpose of computation of depreciation for FY 2020-21 onwards, the Commission has replaced the Original Gross Value of Fixed Assets as on April 01, 2020 with Written Down Value of Fixed Assets as on April 01, 2020. Therefore, when any asset retires out of the block of Fixed Assets existing as on April 01, 2020, the retirement value of such asset need to be considered equivalent to Written Down Value of the same asset as on April 01, 2020 instead of Gross Value of the asset for the purpose of computation of Depreciation in line with the methodology followed by the Commission in its Tariff Order dated July 20, 2022.

4.13.5 The Petitioner therefore for computing the Depreciation for FY 2021-22 considered gross value for assets retired during FY 2021-22 equivalent to the written down value of such assets as on April 01, 2020 instead of their original gross value. The same is summarized below:

TABLE 4-122:SUMMARY OF RETIREMENT VALUE CONSIDERED FOR COMPUTING DEPRECIATION (Rs. Crore)

Particulars	Original Gross Value	Considered for Depreciation Computation
Assets Retired out of block of assets capitalised till FY 2019-20	10.41	3.76
Assets Retired out of block of assets capitalised from FY 2021-22 onwards	0.03	0.03
Total	**10.44**	**3.79**

4.13.6 With regard, to the disposal / retirement of the assets, the Commission has taken retirement / disposal of assets in Part-A & Part-B as per the submission given by the Petitioner in Fixed Assets Register for FY 2021-22 and other subsequent submissions. Therefore, the detailed calculation of depreciation for FY 2021-22 is shown in the Tables below: -

TABLE 4-123: GROSS ALLOWABLE DEPRECIATION FOR ASSETS UPTO MARCH 31, 2020 OF NPCL FOR FY 2021-22 (Rs. Crore) (PART- A)

S. No.	Particulars	Opening GFA	Addition to GFA	Deduction to GFA	Closing GFA	Average GFA	Depreciation Rate	Allowable Gross Depreciation
1	Land	42.60	0.00	0.00	42.60	42.60	3.34%	1.29
2	Buildings	150.81	0.00	0.00	150.81	150.81	3.34%	5.04
3	Plant & Machinery	34.15	0.00	0.00	34.15	34.15	5.28%	1.80
4	Lines & Cables	494.50	0.00	4.24	490.26	492.38	5.28%	26.00
5	Vehicles	0.00	0.00	0.00	0.00	0.00	9.50%	0.00
6	Furniture & Fixtures	15.83	0.00	0.00	15.83	15.83	6.33%	1.00
7	Office Equipments	9.18	0.00	1.08	8.10	8.64	6.33%	0.55
8	Metering Equipment	35.52	0.00	3.88	31.64	33.58	5.28%	1.77
9	Communication Equipment	10.08	0.00	0.49	9.59	9.83	5.28%	0.52
10	Intangible Assets	21.95	0.00	0.00	21.95	21.95	15.00%	3.29
11	Assets taken over & pending for final valuation	0.74	0.00	0.00	0.74	0.74	15.00%	0.11
12	Solar Power Generation Equipment	0.17	0.00	0.00	0.17	0.17	5.28%	0.01
13	**Total Fixed Assets**	**815.54**	**0.00**	**9.69**	**805.85**	**810.69**	**5.13%**	**41.38**
14	Non depreciable assets (Land & Land Rights)	3.92	0.00	0.00	3.92	3.92	-	-
15	**Depreciable assets**	**811.62**	**0.00**	**9.69**	**801.93**	**806.77**	**5.13%**	**41.38**

TABLE 4-124: GROSS ALLOWABLE DEPRECIATION FOR ASSETS FROM APRIL 01, 2020 ONWARDS OF NPCL FOR FY 2021-22 (Rs. Crore) (PART – B)

S. No	Particulars	Opening GFA	Addition to GFA	Deduction to GFA	Closing GFA	Average GFA	Depreciation Rate	Allowable Gross Depreciation
1	Land	0.00	0.00	0.00	0.00	0.00	3.34%	0.00
2	Buildings	6.06	7.44	0.00	13.51	9.78	3.34%	0.33
3	Plant & Machinery	6.55	8.46	0.00	15.01	10.78	5.28%	0.57
4	Lines & Cables	48.07	127.50	0.00	177.57	111.82	5.28%	5.90
5	Vehicles	0.00	0.00	0.00	0.00	0.00	9.50%	0.00
6	Furniture & Fixtures	0.41	0.02	0.00	0.43	0.42	6.33%	0.03
7	Office Equipment	0.27	0.11	0.00	0.38	0.33	6.33%	0.02
8	Metering Equipment	10.48	12.05	0.03	22.50	16.49	5.28%	0.87
9	Communication Equipment	3.86	1.41	0.00	5.26	4.56	5.28%	0.24
10	Intangible Assets	4.34	8.13	0.00	12.47	8.40	15.00%	1.26
11	Assets taken over & pending final valuation	0.00	0.00	0.00	0.00	0.00	15.00%	0.00
12	Solar Power Generation Equipments	0.00	0.00	0.00	0.00	0.00	5.28%	0.00
13	Total Fixed Assets	80.03	165.12	0.03	245.12	162.58		
14	Non depreciable assets (Land & Land Rights)	0.00	0.00	0.00	0.00	0.00		
15	**Depreciable assets**	**80.03**	**165.12**	**0.03**	**245.12**	**162.58**	**5.67%**	**9.22**

TABLE 4-125: NET APPROVED DEPRECIATION OF NPCL FOR FY 2021-22 (Rs. Crore)

S. No.	Particulars	Claimed	Allowable
1	Gross allowable Depreciation (Part-A)	54.55	41.38
2	Gross allowable Depreciation (Part-B)	13.69	9.22
3	Gross allowable Depreciation (Part-A + Part-B)	68.24	50.60
4	Less: Equivalent amount of depreciation on assets acquired out of the Consumer Contribution	11.87	11.87
5	**Net allowable Depreciation (for the year)**	**56.37**	**38.73**

4.14 RETURN ON EQUITY

Petitioner's Submission

4.14.1 The Petitioner submitted that as per Regulation 22 of the MYT Regulations, 2019, Return on Equity shall be allowed @15% on the equity base determined in accordance with the MYT Regulations, 2019. The Petitioner further submitted that FY 2020-21 being the first year of the Control Period FY 2020-21 to FY 2024-25 is governed by MYT Regulation, 2019, therefore, based on Regulation 20.2, the Debt and Equity at end of FY 2019-20 is considered as Opening Debt and Equity for FY 2020-21. The Petitioner has filed appeals against the Tariff Orders dated December 04, 2020 and August 26, 2021 before the Hon'ble APTEL, therefore, it has considered the opening balance of Debt and Equity as per its True-up Petition / submission for determination of return on equity for FY 2020-21. Based on the actual net capital expenditure of Rs. 109.05 Crore and Rs. 140.20 Crore for FY 2018-19 and FY 2019-20 respectively as well as stipulated debt equity of 70:30, the opening normative Equity for FY 2020-21 works out to Rs. 437.99 Crore.

4.14.2 Further, based on the actual net capital expenditure of Rs. 127.70 Crore for FY 2020-21 and stipulated debt equity of 70:30, the opening normative Equity for FY 2021-22 works out to Rs. 464.00 Crore. The summary of Return on Equity for FY 2021-22 based on above referred Opening Equity and equity portion of Assets Capitalized during FY 2021-22 is shown in table below: -

TABLE 4-126: COMPUTATION OF RETURN ON EQUITY FOR FY 2021-22 (Rs. Crore)

Particulars	Ref.	Tariff Order for FY2021-22 dated August 26, 2021	Actual
Regulatory Equity Base at the beginning of the year	a	359.06	461.14
Equity portion of Assets Capitalized during the year	b	36.17	32.98
Regulatory Equity Base at the end of the year	c=a+b	395.23	494.12
Return on Opening Regulatory Equity Base @ 15%	d=ax15%	53.86	69.17
Return on Addition to Equity Base during the year @15%	e=cx15%/2	2.71	2.47
Total Return on Equity	**f=d+e**	**56.57**	**71.64**

Commission's Analysis:

4.14.3 The Commission observe that the opening normative equity for FY 2021-22, claimed by the Petitioner, is neither matching with the approved Trued Up closing value for FY 2020-21 nor from the earlier submission of Petitioner (closing value for FY 2020-21). The Commission vide Deficiency Note Letter dated January 06, 2023 sought the basis for computation of opening equity for FY 2021-22. In reply the Petitioner submitted that the Commission while Truing up the ARR for FY 2020-21 vide its Tariff Order dated July 20, 2022 adopted methodology which varied from the methodology followed by the Commission till Truing up of ARR for FY 2019-20. Accordingly, based on the changed methodology as followed by the Commission, it has restated equity balance for FY 2020-21 as shown in Table below: -

TABLE 4-127: SUMMARY OF EQUITY FOR FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	Reference	As per Old Methodology	As per revised Methodology
1	**Assets Put to use during the year**	**a**	**100.19**	**100.19**
2	Less: Asset Retirement	b	0.00	(3.06)
3	Less: Opening CWIP	c	(22.93)	0.00
4	**Funding required for Assets Put to Use**	**d=a-b-c**	**77.27**	**97.13**
5	**Capital Contribution**	**e**	**(19.97)**	**(19.97)**
6	Less: Capital Contribution (Proportionate)	f	(10.24)	(19.97)
7	**Funding required for Assets Put to Use from Own Sources**	**g=d-f**	**67.03**	**77.16**
8	Equity for Assets Capitalised- @ 30%	h=g x 30%	20.11	23.15
9	Add: Equity portion of Opening CWIP	i	5.90	0.00
10	**Total Equity portion of Assets put to use during the year**	**j=h+i**	**26.01**	**23.15**
11	Opening Equity	k	437.99	437.99
12	Closing Equity	l=j+k	**464.00**	**461.14**

4.14.4 The closing balance of equity of FY 2020-21 as approved by the Commission in the Tariff Order dated July 20, 2022 has been considered as opening equity for FY 2021-22 (as on April 1, 2021). Further, 30% of approved asset capitalised (net off deduction / de-capitalization and consumer contribution) has been considered as equity addition during the year.

4.14.5 The Commission considered debt equity ratio for the assets capitalized as 70:30 in line with MYT Regulations, 2019. In case the equity is less than 30%, the actual equity shall be considered and if equity is more than 30%, the amount of equity shall be limited to 30%. Therefore, the balance asset capitalized shall be treated as normative loan for determination of tariff. The same approach was considered for approval of ARR in the Tariff Order for FY 2020-21, FY 2021-22 and FY 2022-23. Further, 30% of net asset capitalized (after considering deduction / de-capitalization and consumer contribution) has been considered as equity addition during FY 2021-22.

4.14.6 The Regulation 22 of MYT Regulations, 2019 provides for RoE @15% as specified below:

Quote

22.1 Return on equity shall be computed in Rs. terms on equity base at the rate of 14.5% post-tax per annum for the Transmission Licensee and at the rate of 15% post-tax per annum for Distribution Licensee respectively as determined in accordance with Regulation 20:

Provided that assets funded by Consumer Contribution / Deposit works, Capital Subsidies / Grants and corresponding Depreciation shall not form part of the Capital Cost. Actual Equity infused by the Licensee as per book value shall be considered and shall be used for computation in these Regulations.

Unquote

4.14.7 The Commission has considered the rate of Return on Equity as per the provisions of above said Regulation. Accordingly, the Return on Equity claimed by the Petitioner and approved by the Commission for FY 2021-22 is shown below:

TABLE 4-128: RETURN ON EQUITY FOR FY 2021-22 AS APPROVED BY THE COMMISSION

(Rs. Crore)

Particulars	Approved in TO dated 26.08.2021	Claimed in Petition	Approved Upon Truing up
Equity (Opening Balance)	359.06	461.14	332.92
Net additions during the year	36.17	32.98	22.97
Equity (Closing Balance)	395.23	494.12	355.89
Average Equity	**377.15**	**477.63**	**344.41**
Rate of Return on Equity(%)	15.00%	15.00%	15.00%
Return on Equity	**56.57**	**71.64**	**51.66**

4.15 INCOME TAX

4.15.1 The Petitioner submitted that Regulation 26 of MYT Regulations, 2019 provides for determination of Income Tax to be considered in ARR for Control period. The relevant extract of the regulation is as follows:

Quote

26.Income Tax

26.1Income Tax, if any, on the licensed business of the Licensee shall be treated as expense and shall be recoverable from consumers through Tariff. However, tax on any income other than that through its Licenced business shall not be a pass through, and it shall be payable by the Licensee itself.

26.2Notwithstanding anything contained in Regulation 26.1, total Income Tax payable by the Licensee, in any year, shall be lowest of the following:

(a) Actual payment made;

(b) ROE allowed in that year x MAT (%) or ROE allowed in that year x Corporate tax (%), whichever is applicable.

26.3Any under recoveries or over recoveries of Tax on income shall be adjusted every year on the basis of Income Tax assessment under the Income Tax Act 1961, subject to Regulation 26.2 above, as certified by the Statutory Auditors.

Unquote

4.15.2 The Petitioner submitted that the Central Government on September 20, 2019 introduced "Taxation Laws (Amendment) Act, 2019" wherein a new Corporate Tax Rate at 25.17% including Surcharge and Cess has been introduced under newly inserted Section 115BAA. However, the new rate U/s 115 BAA can be availed only by foregoing some specified exemption/deduction/allowance otherwise available in the Income Tax Act, 1961 as evident from the extract of the Amendment Act reproduced below:-

Quote

115 BAA (2) For the purposes of sub-section (1), the total income of the company shall be computed—

(i) without any deduction under the provisions of section 10AA or clause (iia) of sub-section (1) of section 32 or section 32AD or section 33AB or section 33ABA or sub-clause (ii) or sub-clause (iia) or sub-clause (iii) of sub-section (1) or sub-section (2AA) or sub-section (2AB) of section 35 or section 35AD or section 35CCC or section 35CCD or under any provisions of 80b[Chapter VI-A under the heading "C.—Deductions in respect of certain incomes" other than the provisions of section 80JJAA];

(ii) without set off of any loss carried forward or depreciation from any earlier assessment year, if such loss or depreciation is attributable - to any of the deductions referred to in clause (i);

(iii) without set off of any loss or allowance for unabsorbed depreciation deemed so under section 72A, if such loss or depreciation is attributable - to any of the deductions referred to in clause (i); and

(iv) by claiming the depreciation, if any, under any provision of section 32, except clause (iia) of sub-section (1) of the said section, determined in such manner as may be prescribed.

(3) The loss and depreciation referred to in clause (ii) and clause (iii) of sub-section (2) shall be deemed to have been given full effect to and no further deduction for such loss or depreciation shall be allowed for any subsequent year

Unquote

4.15.3 The Petitioner considered the lower tax rate available under the Income Tax Act and the interest of the Consumers in mind has adopted the new tax rate and accordingly has paid Income Tax for FY 2021-22 at the rate of 25.17% as against normal tax rate of 34.94%. The Petitioner accordingly computed the Income Tax expense for FY 2021-22 by grossing up aggregate of tax expense i.e., tax on Return on equity at the current tax rate as shown below:

TABLE 4-129: INCOME TAX SUBMITTED BY PETITIONER FOR FY 2021-22 (Rs. Crore)

Sl. No.	Nature of Tax	Ref.	Approved	Actual
1	Return on Equity	A	56.57	71.64
2	Income Tax Rate	B	25.17%	25.17%
3	**Total Tax Expense**	**c=a x b/(1-b)**	**19.03**	**24.10**

Commission's Analysis

4.15.4 The Commission observed that the Petitioner had not provided the Challan details for the amount paid under the TDS and TCS heads in regard to this the Commission vide email dated February 17, 2023 sought documentary evidence such as Form 26AS & TDS/ TCS certificates and others relevant details such as sample bills on which TCS deducted as well as relevant provisions for the same shall be provided. In reply the Petitioner submitted that the vendors / consumers making the payment to it withhold certain part thereof as Tax Deducted at Source (TDS) or Tax Collected at Source (TCS) to comply with Section-190(1) of the Income Tax Act, 1961 reproduced below for ready reference:

Quote:

Section 190 (1) Notwithstanding that the regular assessment in respect of any income is to be made in a later assessment year, the tax on such income shall be payable by deduction or collection at source or by advance payment or by payment under sub-section (1A) of section192], as the case may be, in accordance with the provisions of this Chapter…..

Unquote

4.15.5 The Petitioner further submitted that as per the above Income Tax Act, 1961 it provides specific provisions for deduction of TDS from various income earned by Taxpayers through Salaries, Contractual work, Interest, Rent, Sale of Goods [newly introduced in FY 2021-22, Section-194Q and Section 206C(1H)] etc. Such TDS / TCS deducted by the Customers / Service Providers is reflected in Form-26 AS and is considered as part of the taxes paid by the Company for the purpose of meeting its tax liability. In support, the extracts of Form 26AS containing details of TDS and TCS deducted by the Vendors / Customers and also the sample copies of bills wherein TCS has been levied is submitted before the Commission for consideration.

4.15.6 The Commission observed that the Petitioner in its support of claim submitted the copy of Tax Challan of Rs. 24.57 Crore along with the petition as summarized below:

TABLE 4-130: SUMMARY OF TAX CHALLANS SUBMITTED BY THE PETITIONER FOR FY 2021-22

S. No.	Particulars	Amount (in Rs.)	Date of Payment	Challan No.	Bank
1	Advance Tax for FY 2021-22	2,70,00,000	15-06-2021	47935	HDFC Bank
2	Advance Tax for FY 2021-22	5,70,00,000	14-09-2021	44970	HDFC Bank
3	Advance Tax for FY 2021-22	7,40,00,000	15-12-2021	21208	ICICI Bank
4	Advance Tax for FY 2021-22	6,00,00,000	14-03-2022	21738	ICICI Bank
Total Advance Tax		**21,80,00,000**			
5	Tax Deducted at Source (TDS)	2,55,47,412			
6	Tax Collected at Source (TCS)	21,32,154			
Total Tax Paid		**24,56,79,566**			

4.15.7 The Commission vide email dated February 17, 2023 sought reconciliation of the claimed amount of Rs.24.10 Crore as expense towards Income Tax along with the amount given in the relevant notes of the audited accounts for FY 2021-22 in reply the Petitioner submitted that it has claimed Normative Income Tax Expense in True-up ARR for FY 2021-22 on the basis of Regulation 26 of the MYT Regulations, 2019 as Table below: -

Table 4-131: Computation of Income Tax (Rs. Crore)

Particulars	U.o.M.	Ref.	Amount	Remarks
Return on Equity	Rs. Cr.	A	71.64	Refer Form-32 of Appendix-II to Petition No. 1919 /2022
Tax Rate	%	B	25.17%	
Income Tax	**Rs. Cr.**	**c=(a/(1-b))*b**	**24.10**	Refer Form-32 of Appendix-II to Petition No. 1919 /2022

4.15.8 The Petitioner further submitted that the claim of Rs. 24.10 Crore is normative in nature and computed on the basis of MYT Regulations, 2019 and therefore, it is not justifiable to compare the above with tax expenses (which includes deferred tax) as shown in Audited Financial Accounts.

4.15.9 The Commission verified the computations for Income tax claimed for FY 2021-22 and observed that the Petitioner has claimed the normative income tax, based on the return on equity. The Commission has computed the normative income tax based on the return on equity approved for FY 2021-22 which comes out to be lowest in comparison to Income Tax shown in the audited accounts, the Challans and as per Petitioner submission. Accordingly, the Commission approves the income tax for FY 2021-22 based on the approved Return on Equity in this Petition as shown below:

TABLE 4-132: INCOME TAX AS APPROVED BY THE COMMISSION FOR FY 2021-22 (Rs. Crore)

Particulars	Reference	Approved in TO dated 26.08.2021	As per Audited Accounts	As per Challans submitted	Claimed in Petition	Approved Upon Truing Up
Return on Equity	A	56.57	-	-	71.64	51.66
Income Tax Rate	B	25.17%	-	-	25.17%	25.17%
Total Tax Expense	**c=a*b/(1-b)**	**19.03**	**20.34**	**24.57**	**24.10**	**17.38**

4.16 OTHER MISCELLANEOUS EXPENSES

Loss on Retirement/ Impairment of Asset:

Petitioner's submission

4.16.1 The Petitioner submitted that, it has incurred actual loss on sale / retirement of these Fixed Assets during FY 2021-22 amounting to Rs. 2.92 Crore. The Petitioner further added that the Commission in the past was approving such expenses on actual basis. The relevant extract of Tariff Order dated September 03, 2019 is reproduced below:

Quote

3.22.2The Commission is of the view that due to fast obsolescence and normal wear and tear, some of the assets may be required to be scrapped before their useful life. Hence, the loss on sale of assets incurred due to disposal of such scrap assets is genuine and legitimate business expenditure and therefore, the Commission approves miscellaneous expenditure at Rs. 0.83 Crore as per the audited Accounts of the Petitioner for FY 2017-18.

Unquote

4.16.2 The Petitioner submitted that the cycle of assets creation, retirement and funding thereof is illustrated below: -

i. A new fixed asset is capitalized say at Rs.100/-

ii. For funding this Asset Rs. 70 is borrowed (i.e. 70% Debt)

iii. Remaining fund are invested by Licensee (i.e. 30% Equity)

iv. During the lifecycle of the asset the Debt is serviced through Interest on Term Loan and Equity is serviced through RoE both of which are included in ARR

v. Correspondingly, during the life cycle of the asset a Depreciation Reserve of Rs. 90 (i.e. maximum allowed 90%) is charged in ARR

vi. Out of the remaining unrecovered equity of Rs.10 say Rs. 7 is realized from sale of scrap and remaining Rs. 3 is charged / claimed in ARR as Loss on Sale of Retired Assets.

vii. After the completion of life cycle such Asset's original values (i.e. Rs. 100) is reduced from GFA leading to corresponding reduction in Debt by Rs. 70 and Equity by Rs. 30. Hence, no further Interest and RoE is allowed with respect to such asset.

viii. Licensee utilizes the recovered Equity of Rs. 30 (i.e. Depreciation Rs. 20, Scrap Sale Rs. 7 and Loss of Sale Rs. 3) for funding of new Fixed Asset along with fresh Debt to repeat the above cycle.

4.16.3 The Petitioner further elaborated from the above example that when as asset is retired in ARR computation, the original value of the Asset (i.e. Rs. 100) is also reduced from GFA and correspondingly Rs. 30 from Equity even though it has only allowed licensee to recover Rs. 27 (i.e. Rs. 20 through Depreciation and Rs. 7 through Sale of scrap). Thus, the decapitalization of asset actually leads to cessation of servicing of unrecovered equity of the licensee and thus, compensate the allowance of loss by reduction in Return on Equity.

4.16.4 The Petitioner also submitted that the contention additional capex is approved for replacement of such asset in the GFA and the same is approved in the ARR is completely not valid because even Additional / Replacement Capex is funded afresh by the licensee / appellant in Debt Equity ratio of 70:30 and therefore, need to be legitimately allowed. Such fresh asset has its own life cycle and cannot be compared with the older one which is retired. In fact, since the value of assets of retired asset is reduced in full from both Debt and Equity, the Commission is not allowing the value of replacement of assets at all.

4.16.5 In the form of Loss on Sale of Asset, NPCL is claiming only the reimbursement of cost incurred and approved by the Commission. Hence, the cost is already integrated in Tariff and not an additional burden on consumers. The allowance of cost is also off-set by the simultaneous reduction in cost of debt and equity by reduction of the value of such asset from Gross Fixed Asset. Further, denial of its claim of Loss on Sale of Assets, leave the licensee with lesser money to reinvest in Additional/Replacement Capex as well as lesser capacity to borrow, which if continued will adversely affect the consumers as licensee may not be able to timely replace / create necessary distribution infrastructure. The retirement / sale of non-reparable / damaged / inefficient fixed asset is necessary for safety as well as efficient power distribution operations. Thus, the Petitioner requested the Commission to allow the loss on sale of Fixed Assets under Miscellaneous Expenses as claimed in the petition.

Commission's Analysis

4.16.6 The Commission observed that the Petitioner claimed Rs. 2.92 Crore towards loss on sale of Fixed Assets under Miscellaneous expenses. The Commission vide Deficiency Note Letter dated January 06, 2023 sought asset-wise working of the same. In this regard the Petitioner submitted the reconciliation as under:

TABLE 4-133: SUMMARY OF LOSS ON SALE OF ASSET

Sl. No.	Description	Amount (Rs. Cr.)	Remark
1	Gross value of Assets disposed/retired	10.44	Note-3 and Note-4 of Audited Accounts
2	Less: Accumulated Depreciation on Assets retired	7.20	Note-3 and Note-4 of Audited Accounts
3	**WDV of Assets Retired**	**3.24**	
4	Less: Sale Proceeds	0.32	
5	**Loss on Sale of Assets**	**2.92**	Note-33 of Audited Accounts

4.16.7 The Petitioner further submitted that the Commission has been approving such expenses on actual basis in its preceding tariff orders as evident from the following extract of its Tariff Order dated September 03, 2019: -

Quote

3.22.2 The Commission is of the view that due to fast obsolescence and normal wear and tear, some of the assets may be required to be scrapped before their useful life. Hence, the loss on sale of assets incurred due to disposal of such scrap assets is genuine and legitimate business expenditure and therefore, the Commission approves miscellaneous expenditure at Rs. 0.83 Crore as per the audited Accounts of the Petitioner for FY 2017-18.

Unquote

4.16.8 The Petitioner further stated that the Commission in the its Tariff Order dated December 04, 2020 while truing up of loss on Sale of Fixed Assets under Miscellaneous expenses stated as follows: -

Quote:

3.21.4 As regards to the Miscellaneous Expenses, the Commission noticed that the Petitioner has claimed Rs. 0.74 Crore as Loss on sale of Fixed Assets in Miscellaneous expenses. In this regard the Commission sought the following details:

i. *Name of the Asset.*
ii. Asset Installation date.
iii. Useful Life of the Asset.
iv. Depreciation claimed on the asset till date.
iv. Whether depreciation claimed till 90%.

Unquote

4.16.9 The Petitioner submitted the reconciliation for the same as shown in the Table below:

TABLE 4-134: RECONCILIATION OF LOSS ON SALE OF ASSET SUBMITTED BY THE PETITIONER FOR FY 2018-19

Sl. No.	***Description***	***Amount (Rs. Cr.)***	***Remark***
1	*Gross value of Assets disposed/retired*	*4.30*	*Please refer to Note-3 of Audited Accounts*
2	*Less: Accumulated Depreciation on Assets retired*	*3.23*	*Please refer to Note-31 of Audited Accounts*
	WDV of Assets Retired	***1.07***	
2	*Less: Sale Proceeds*	*0.33*	
3	***Loss on Sale of Assets***	***0.74***	

4.16.10 The Petitioner in reference to the above illustrated the cycle of assets creation, retirement and funding thereof as below: -

Example: -

(i) A new fixed asset is capitalized say at Rs.100/-

(ii) For funding this Asset Rs. 70 is borrowed (i.e. 70% Debt)

(iii) Remaining fund are invested by Licensee (i.e. 30% Equity)

(iv) During the lifecycle of the asset the Debt is serviced through Interest on Term Loan and Equity is serviced through RoE both of which are included in ARR

(v) Correspondingly, during the life cycle of the asset a Depreciation Reserve of Rs. 90 (i.e. maximum allowed 90%) is charged in ARR

(vi) Out of the remaining unrecovered equity of Rs.10 say Rs. 7 is realized from sale of scrap and remaining Rs. 3 is charged / claimed in ARR as Loss on Sale of Retired Assets.

(vii) After the completion of life cycle such Asset's original values (i.e. Rs. 100) is reduced from GFA leading to corresponding reduction in Debt by Rs. 70 and Equity by Rs. 30. Hence, no further Interest and RoE is allowed with respect to such asset.

(viii) Licensee utilizes the recovered Equity of Rs. 30 (i.e. Dep. Rs. 20, Scrap Sale Rs. 7 and Loss of Sale Rs. 3) for funding of new Fixed Asset along with fresh Debt to repeat the above cycle.

4.16.11 The Petitioner further stated that in the form of Loss on Sale of Asset, the licensee is only claiming its hard-earned money which has already invested in creation of Distribution Network in its license area for servicing its consumers as against erroneous presumption for the same being an additional burden to consumers. In fact, by allowing loss on sale of asset, the licensee is claiming to only reimburse the cost incurred by it earlier and already approved by the Commission. Hence, the cost is already integrated in Tariff and not an additional burden on consumers. The allowance of cost is also off-set by the simultaneous reduction in cost of debt and equity by reduction of the value of such asset from Gross Fixed Asset.

4.16.12 The Petitioner further stated that when as Asset is retired, in ARR computation the original value of the Asset (i.e. Rs. 100) is also reduced from GFA and correspondingly Rs. 30 from Equity even though it has only allowed licensee to recover Rs. 27 (i.e. Rs. 20 through Dep. and Rs. 7 through Sale of scrap). Thus, the decapitalization of asset actually leads to cessation of servicing of unrecovered equity of the licensee and thus, compensate the allowance of loss by reduction in Return on Equity.

4.16.13 The Petitioner also submitted that the contention additional capex is approved for replacement of such asset in the GFA and the same is approved in the ARR is not valid because even Additional / Replacement Capex is funded afresh by the licensee / appellant in Debt Equity ratio of 70:30 and therefore, need to be legitimately allowed. Such fresh asset has its own life cycle and cannot be compared with the older one which is retired. In fact, since the value of assets of retired asset is reduced in full from both Debt and Equity, the Commission is not allowing the value of replacement of assets at all. The Petitioner also submitted that the denial of its claim of Loss on Sale of Assets, leave the licensee with lesser money to reinvest in Additional / Replacement Capex as well as lesser capacity to borrow, which if continued will adversely affect the consumers as licensee may not be able to timely replace / create necessary distribution infrastructure. Further, the retirement / sale of non-reparable / damaged

/ inefficient fixed asset is necessary for safety as well as efficient power distribution operations and requested the Commission to approve the loss on sale of fixed assets as claimed in the Petition.

Commission's Analysis

4.16.14 The Commission, took a considered view on the above said matter in past True-up Orders of FY 2019-20 & FY 2020-21. The Commission is of the view that the MYT Regulation provisioned that 90% of the assets value to be covered though deprecation value, whereas the remaining 10% will be scrap value and to be recovered through sale of the assets. Further, the Commission emphasis that the deprecation rate is defined in the MYT Regulations, 2019 to recover the 90% of the asset value, only when the asset is put to use for its useful life. In case the asset is removed from the system before the useful life due to any reason and not put to use, the Commission is of the view that the consumer is not liable to pay for the same. Thus, any loss or again on the part of sale of asset for the assets which are removed from the system before the serving the useful life is on the part of Petitioner. Accordingly, the Commission is not approving any loss on retirement / impairment of assets for FY 2021-22.

4.17 PROVISION FOR BAD AND DOUBTFUL DEBTS

Petitioner's submission

4.17.1 The Petitioner submitted that the expenses for Provision for Bad and doubtful debts actually incurred is as mentioned below:

TABLE 4-135: PROVISION FOR BAD & DOUBTFUL DEBTS FOR FY 2021-22 (Rs. Crore)

Sl. No.	Description	Approved	Actual
1	Opening Receivable	2049.03	95.80
2	Revenue billed for the year		2031.41
3	Collection for the year		2038.21
4	Closing Receivable		89.00
5	Provision for Bad & Doubtful Debts	19.07	18.31
6	Provision as % of Revenue billed	0.93%	0.90%

4.17.2 The Petitioner submitted that the aforesaid bad debts have been determined in accordance with its policy for provision and write-off of receivable. The Petitioner further state that the dues from consumers which are long outstanding but could not be disconnected because of political or other reasons. These debtors are older than two-three years and recovery thereof has become costlier and uneconomical. Further, prolonged litigation process for the purpose of recovery culminate into very high legal costs and colossal waste of precious time of its officials which otherwise could be used for productive purposes.

4.17.3 The Petitioner further submitted that the electricity distribution business is not only the most challenging segment among generation, transmission and distribution, but also exposed to maximum business risks, because on one hand the purchase of electricity is from few sources and that too through Letter of Credit or Bank Guarantee, on the other hand the sales thereof is on credit to the thousands of customers in various segments from industry to rural and unmetered consumers. Therefore, while converting “electricity” into cash, it is the distribution Company which bears the maximum brunt in terms of bad debts and problem of recovery further gets compounded in the prevailing socio-political and economic environment, law and order situation and power deficit scenario.

4.17.4 In view of the above, any recovery around 97-98% of sales should undoubtedly be considered as efficient collection and therefore, the remaining 2-3% should be provided as bad and doubtful debts. The provision for Bad Debts considered by the Petitioner is still lower.

4.17.5 The Petitioner further submitted that the amount of Rs. 18.31 Crore provided as bad debts in FY 2021-22 is well within the norms of 2% specified in Regulation 46.1 of the MYT Regulations, 2019, thus, it is requested to approve the bad debts of Rs. 18.31 Crore, which is only 0.90% of the revenue for True-up of ARR for FY 2021-22.

4.17.6 The Petitioner submitted that the Commission, while approving the provision for Doubtful Debt for FY 2021-22 vide its Tariff Order dated August 26, 2022 excluded the amount of bad debts with respect to electricity duty. In this respect, it is relevant here to refer Section 4A of the U. P. Electricity (Duty) Act, 1952 as provides here-under:

Quote

4-A. Reimbursement of electricity duty from consumers

……….

(2) For the purpose of recovering the amount of electricity duty from the consumer, the licensee or the appointed authority, as the case may be, may without prejudice to any other mode of recovery, exercise the power conferred on the licensee under sub-section (1) of the Section 24 of the Indian Electricity Act, 1910 (Act no, IX of 1910), as if the duty were a charge or sum due in respect of energy supplied to such consumer.

………..

Unquote

4.17.7 It may be observed from the above provisions of the Section 4A, that the Electricity Duty is considered at par with the charges for energy supplied to a consumer and accordingly, the Electricity Duty is billed by the Petitioner to the consumers along with the other charges for electricity. Therefore, the same is integral part of the revenue and the receivables of the Petitioner. Accordingly, the Commission in the past has been allowing the same as a part of the revenue receivables. In view of the above, THE Petitioner considered the bad debts of Rs. 18.31 Crore for FY 2021-22 including Rs. 0.87 Crore towards electricity duty.

Commission's Analysis

4.17.8 Regulation 46 of the MYT Regulations, 2019 provides for expenses under bad and doubtful Debts to the extent of 2% of the revenue receivables as shown below:

Quote

46.1. For any Year, the Commission may allow a provision for write off of bad and doubtful debts up to 2% of the amount shown as Revenue Receivables from sale of electricity in the audited accounts of the Distribution Licensee for that Year or the actual write off of bad debts, whichever is less:

Provided further that such provision allowed by the Commission for any Year shall not exceed the actual provision for write off of bad and doubtful debts made by the Distribution Licensee in the audited accounts of that Year:

Provided that the Commission, in its ARR / Tariff Order, may provisionally approve provision for write off of bad and doubtful debts based on the actual provision for write off of bad and doubtful debts made by the Distribution Licensee in the latest Audited Accounts available for the Petitioner, and as allowed by the Commission:

Provided further that if subsequent to the write off of a particular bad debt, revenue is realised from such bad debt, the same shall be included under the Non-Tariff Income of the year in which such revenue is realised.

Unquote

4.17.9 The Commission vide deficiency letter dated January 06, 2023 sought the Board Resolution for approval of writing off the bad Debts along with the Consumer-wise. The Petitioner in its reply submitted that the Commission vide its Order dated November 30, 2017 (through Directives) directed the Petitioner to submit its policy for identifying and writing off bad debts, which was duly submitted vide letter no. P-77A/2018/009 dated July 18, 2018. The Commission in its Tariff Order dated January 22, 2019 acknowledged the same as under: -

"Policy for provision and write-off of debtors for FY 2016-17 is submitted along with the sample cases."

4.17.10 The Petitioner submitted that based on the aforesaid policy, the Company has been providing Bad Debt in its Audited Annual Accounts which are part and parcel of the audited Annual Accounts being approved by the Board of Directors in its meeting every year.

4.17.11 The Petitioner submitted that it has been providing Bad Debts in its books of accounts in accordance with the aforesaid policy and so far, been able to contain the same below the norms of 2% of Revenue as per the MYT Regulations, 2014 and MYT Regulations, 2019.

4.17.12 The Commission vide deficiency letter dated January 06, 2023 sought clarification from the Petitioner regarding the bad and doubtful debt booked in the Audited Account is pertaining to sale of electricity, in reply the Petitioner confirms that the bad and doubtful debt booked in the Audited Account is pertaining to sale of electricity.

4.17.13 The Commission observed that the Licensee has claimed an amount of Rs. 0.87 Crore towards bad debts including bad debts on Electricity Duty. In this regard, the Commission vide email dated February 08, 2023 sought justification for arriving at the value of bad debts on electricity duty of Rs. 0.87 Crore for FY 2021-22. The Petitioner in its reply stated to ignore the inadvertent error of stating the electricity duty on bad debts as Rs. 0.87 Crore and read it as Rs. 0.83 Crore and submitted the computation of Electricity Duty component in Bad Debts and Provision for Doubtful Debts as below table: -

TABLE 4-136: ELECTRICITY DUTY ON BAD DEBTS

Sl. No.	Description	Ref	Amount in Rs. Cr.	Remark
1	Net Revenue for FY 2021-22	A	1939.66	Please refer to Note-27 of Audited Accounts
2	Electricity Duty for FY 2021-22 (net of refund)	B	77.93	
3	Electricity Duty refunded to Consumers pursuant to Direction of DOES	C	13.80	
3	**Gross Electricity Duty**	**D=B+C**	**91.74**	
4	**Electricity Duty Component in Gross Revenue**	**E=D/A**	**4.73%**	
5	Bad Debts written off	F	7.48	Please refer to Note-33 of Audited Accounts
6	Provision for Doubtful Debts	G	10.84	
7	**Total Bad Debts and Provision for Doubtful Debts**	**H=F+G**	**18.31**	
8	Electricity Duty component in Provision for Doubtful Debts @ 4.73%	I=H xE/(1+E)	0.83	

4.17.14 The Commission noticed that the Petitioner has claimed Rs. 18.31 Crore including bad debt of Rs. 0.83 Crore towards Electricity Duty. The Commission is of the view that since Electricity Duty is not a part of ARR, thus, bad debt on electricity duty should also not be part of ARR. Thus, the Commission has considered the Bad debt of Rs. 17.48 Crore after deduction of bad debt on Electricity Duty, which is less than norms of 2% of Revenue as per MYT Regulations, 2019.

TABLE 4-137: BAD AND DOUBTFUL DEBTS APPROVED BY THE COMMISSION FOR FY 2021-22 (Rs. Crore)

Particulars	FY 2021-22 (True up)		
	Approved in TO dated 26.08.2021	Claimed in Petition	Approved Upon Truing Up
Revenue billed during the year	2049.03	1939.66	1939.66
Provision of bad and doubtful debt	19.07	18.31	18.31
Less: Electricity Duty	-	**0.83**	**0.83**
Net-Provision of Bad & doubtful debt	-	**17.48**	**17.48**
Bad & Doubtful Debts as % revenue billed claimed	0.93%	0.90%	0.90%

4.18 NON-TARIFF INCOME

Petitioner's submission

4.18.1 The Petitioner submitted that Regulation 47 of MYT Regulations, 2019 provides for consideration Non-Tariff Income (NTI) in ARR as follows: -

Quote

47. Non-Tariff Income

47.1The amount of Non-Tariff Income relating to the Distribution Business as approved by the Commission shall be deducted from the ARR in determining the Tariff for retail supply and Wheeling Charges of the Distribution Business:

Provided that the Distribution Licensee shall submit full details of its forecast of Non-Tariff Income to the Commission in such form as may be stipulated by the Commission.

47.2 The Non-Tariff Income shall include:

a) Income from rent of land or buildings;
b) Income from sale of scrap;
c) Income from investments;
d) Interest income on advances to suppliers/contractors;
e) Interest income on loans / advances to employees;
f) Income from rental from staff quarters;
g) Income from rental from contractors;
h) Income from hire charges from contactors and others;
i) Income from delayed payment surcharge, supervision charges, etc.;
j) Supervision charges for capital works;
k) Income from recovery against theft and/or pilferage of electricity;
l) Income from advertisements;
m) Income from sale of tender documents;
n) Excess found on physical verification;
o) Prior Period Income;
p) Miscellaneous receipts; and
q) Any other Non-Tariff Income:

Provided that the interest earned from investments made out of Return on Equity corresponding to the regulated Business of the Distribution Business shall not be included in Non-Tariff Income.

Unquote

4.18.2 Accordingly, Non-Tariff Income comprising Income from delayed payment surcharge and other miscellaneous receipts incidental to business of electricity supply during FY 2021-22 is summarized below:

TABLE 4-138: NON-TARIFF INCOME FOR FY 2021-22 (Rs. Crore)

Sl. No.	Particulars	Approved	Actual
1	Income from Contingency Reserves Investments	9.36	0.16
2	Miscellaneous Receipts from Consumers		1.38
3	Miscellaneous Receipts from other sources		2.41
4	Delayed Payment Surcharge		4.80
5	Total Non-Tariff Income	9.36	8.75

4.18.3 The Petitioner submitted that other income as shown above excludes income from treasury operations amounting to Rs. 25.59 Crore as this Income is generated upon the funds accrued through internal resources over earlier years. Since, this income has been generated out of utilisation of internal funds of the Company which are not the part of licensed business the same has not been considered as part of ARR. The other income also excludes Notional Gain on fair value of non-current Investment amounting to Rs. 2.46 Crore. Accordingly, the Petitioner requested the Commission to consider the Non-Tariff Income as Rs. 8.75 Crore for FY 2021-22.

Commission's Analysis

4.18.4 The Commission observed that the Petitioner claimed Non-Tariff Income of Rs. 8.75 Crore instead of Rs. 36.90 Crore (Refer: Note: 28 (Other Income) & Note: 27 (Revenue from Operations)) specified in the Audited Accounts of FY 2021-22. The Commission vide Deficiency Note Letter dated January 06,2023 sought detailed justification and reason for not submitting the Non-Tariff Income as per the Audited Accounts.

4.18.5 The Petitioner in its reply submitted that the detailed justification for claiming Non-Tariff Income (NTI) of Rs. 8.75 Crore instead of Rs. 36.90 Crore is elaborated in the petition and accordingly, Non-Tariff Income comprising of income from delayed payment surcharge and other miscellaneous receipts incidental to business of electricity supply during FY 2021-22 is summarized below:

TABLE 4-139: NON-TARIFF INCOME FOR FY 2021-22 (Rs. Crore)

Sl. No.	Particulars	Approved	Actual
1	Income from Contingency Reserves Investments	9.36	0.16
2	Miscellaneous Receipts from Consumers		1.38
3	Miscellaneous Receipts from other sources		2.41
4	Delayed Payment Surcharge		4.80
5	Total Non-Tariff Income	9.36	8.75

4.18.6 The other income as shown above excludes income from treasury operations amounting to Rs. 25.59 Crore as this Income is generated upon the funds accrued through internal resources over earlier years. Since, this income generated out of the utilisation of internal funds of the Company which are not the part of licensed business the same has not been considered as part of ARR. The other income also excludes Notional Gain on fair value of non-current Investment amounting to Rs. 2.46 Cr.

4.18.7 Further, the reconciliation of Non-Tariff Income claimed in the petition and in the audited accounts for FY 2021-22 is tabulated below:

TABLE 4-140: NON-TARIFF INCOME FOR FY 2021-22 (Rs. Crore)

Sl. No.	Particulars	Actual
1	Non- Tariff Income as per 13.1. Regulation 47 of MYT Regulations, 2019	8.75
2	Revenue from Open Access Customer	0.10
2	Total Non-Tariff Income to be considered for Truing UP	8.85
3	Income from treasury operations	25.59
4	Notional Gain on fair value of non-current Investment as per Ind AS (only an accounting adjustment as per Ind AS and no actual gain / loss on Investment)	2.46
5	Non-Tariff Income as per Note: 28 (Other Income) & Note: 29 (Revenue from Operations)) specified in the Audited Accounts of FY 2021-22.	36.90

4.18.8 The commission is of the view that the Petitioner have only one business i.e. distribution in Greater Noida, hence all income in the Balance Sheet come under the ambit of the True-Up. Further, in case, the Appellant has some other business the same would have been covered as per relevant provision / Regulation of other business.

Table 4-141: DETAILS OF NON-TARIFF INCOME AS PER AUIDITED ACCOUNTS FOR FY 2021-22

Sl. No.	Description	Amount (Rs. Cr.)	Remark
1	Processing Charges	0.35	Note-27 of Audited Accounts
2	Disconnection and reconnection fees	0.95	Note-27 of Audited Accounts
3	Meter Testing Charges	0.50	Note-27 of Audited Accounts
4	Open Access and wheeling charges	0.10	Note-27 of Audited Accounts
5	On Non-Current investments	0.14	Note-28 of Audited Accounts
6	On Bank deposits	21.42	Note-28 of Audited Accounts
7	Other	0.46	Note-28 of Audited Accounts
8	Dividend Income	0.02	Note-28 of Audited Accounts
9	Gain on sale of Short-Term investments	4.17	Note-28 of Audited Accounts
10	Liquidated damages recovery	0.80	Note-28 of Audited Accounts
11	Supervision charges	0.08	Note-28 of Audited Accounts
12	Gain on fair value investment	2.46	Note-28 of Audited Accounts
13	Miscellaneous Income	0.65	Note-28 of Audited Accounts
14	Delayed Payment Surcharge	4.80	Note-28 of Audited Accounts
		36.90	

4.18.9 Regulation 47 of MYT Regulations, 2019 detailed the components to be part of Non-Tariff Income and after reviewing the audited account and further prudence check approves the Non-Tariff Income for FY 2021-22 as shown below.

TABLE 4-142: NET NON-TARIFF INCOME FOR FY 2021-22 APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	FY 2021-22		
	Approved in TO dated 26.08.2021	Claimed in Petition	Approved Upon Truing Up
Net Non- Tariff Income	9.36	8.75	36.90

4.19 REVENUE FROM SALE OF POWER

Petitioner's submission

4.19.1 The Petitioner submitted the actual category-wise sales, revenue and average realization for FY 2021-22 as per Accounting Statements are given in the table below.

TABLE 4-143: CATEGORY WISE SALES AND REVENUE FOR FY 2021-22

Sl. No.	Category	Sales (MU)	Revenue (Rs. Crore)	ABR (Rs./kWh)
1	LMV-1: Domestic Light, Fan & Power	694.48	464.53	6.69
2	LMV-2: Non Domestic Light, Fan & Power	41.45	46.89	11.31
3	LMV-3: Public Lamps	37.35	34.90	9.34
4	LMV-4: Institutions	12.25	10.60	8.66

Sl. No.	Category	Sales (MU)	Revenue (Rs. Crore)	ABR (Rs./kWh)
5	LMV-5: Private Tube Wells	14.58	3.68	2.53
6	LMV 6: Small and Medium Power	100.70	103.59	10.29
7	LMV-7: Public Water Works	24.91	27.69	11.12
8	LMV-8: STW and Pumped Canals	0.06	0.21	32.52
9	LMV-9: Temporary Supply	45.96	57.06	12.42
10	LMV-11: Electric Vehicle Charging	0.00	0.00	0.00
11	HV-1: Non Industrial Bulk Power	216.13	237.70	11.00
12	HV-2: Large and Heavy Power	1,150.17	952.80	8.28
13	**Total**	**2,338.04**	**1,939.66**	**8.30**

4.19.2 The Petitioner submitted that the Commission vide its Tariff Order of FY 2022-23 dated July 20, 2022 has included the deemed revenue against the Captive Consumption of the Company at the rate of LMV-4 (B) and Sales (MU) at the time of True up for FY 2020-21. Aggrieved by the aforesaid treatment, the Petitioner has filed an appeal no 398 of 2022 before the Hon'ble APTEL, which is pending for adjudication.

4.19.3 The Petitioner further submitted that the aforesaid matter is still pending before the Hon'ble APTEL and thus has considered the captive consumption for FY 2022-23 under Category 4(B) as per the directions of the Commission, however, the revenue has been considered at NIL value as per past practices. The Commission may please appreciate that if the Captive Consumption in MUs is not included in the Sales, the same will result in incorrect computation of the T&D Losses. Therefore, it is very much necessary to include the Captive Consumption in MUs in the Sales. The Petitioner submitted that earlier it was considering unit consumed captively under LMV-4 (A) category.

4.19.4 The Petitioner submitted the details of the Captive Consumption and corresponding amount as per the tariffs of 4 (B) category are given in Table below:

TABLE 4-144: CAPTIVE CONSUMPTION REVENUE FOR FY 2021-22

Particulars	FY 2021-22	Remark
Sales (MU)	2.79	Included in Sales
Revenue (Rs. Cr.)	5.42	Not included in Revenue

4.19.5 The Petitioner submitted that all the connections for captive purposes are metered and are duly reconciled every month. The recorded energy in the meters has been considered in the Sales since inception and has also been allowed by the Commission accordingly.

4.19.6 The Petitioner also submitted that the Hon'ble Tribunal has dealt with the issue of self/ captive consumption by a Distribution Licensee in the matter of **Arun Kumar Datta Vs. DERC & Anr. in Appeal No.195 of 2013 [Judgement dated 09th February, 2015]** wherein it was observed as:

Quote

13.4 We feel that the Appellant should have installed meters for self-consumption in all its offices, call centers, substations, etc. The Respondent no.2 does not need specific instructions for the same. When the Respondent no.2 is including self-consumption in its energy sale figures, then it was legally bound to supply electricity for own consumption only through correct meters. ***We feel that the State Commission should have allowed self consumption only to the extent of actual consumption for metered installations****. The formula proposed by the Respondent no. 2 for calculating own consumption in its installations is for calculating energy consumption for consumers in case of faulty/tempered meters.* ***Accordingly, we direct the State Commission to redetermine the self consumption based on the metered data only.*** *We also do not feel that this would result in change in procedure in true up with respect to the MYT order dated 23.02.2008. In the MYT order the consumption is based on the projections. In the MYT order the State Commission has not approved that the self consumption would not be metered and would only be assessed by a formula considering the load, number of days/hours, load factor, etc.*

13.5 As regards contention of the Appellant for determination of AT&C loss, ***we feel that if the self consumption is deducted from energy sales figures then corresponding reduction has to be effected in the energy input into the distribution system also****. In view of our directions in para 13.4, we do not want to give any direction with regard to procedure for determination of AT&C loss in the true-up of FY 2010-11.*

Unquote

4.19.7 The Petitioner submitted that as per the above Judgement of the Hon'ble Tribunal it is also clear that the self/ captive consumption by Distribution Licensee in running its offices, call centers, substations, Distribution Business etc. are require to be allowed by the Commission to the extent of actual consumption for metered installations.

4.19.8 The Petitioner submitted that to continue the treatment of captive consumption at NIL value as has been considered by the Commission in the previous Orders. Captive consumption cannot be treated as sale. Sale in its grammatical means any transfer of property in goods by one person to another. The Commission may please appreciate that there is no transfer in case of captive consumption.

4.19.9 The Petitioner further submitted if the Commission decides to include the Captive Consumption both Revenue (Rs.) and Sales (MU), then corresponding actual expenses in the A&G should also be allowed as the base A&G expenses does not include expenses on account of Captive Consumption due to the reason that the Commission has first time decided to include the same in Revenue of FY 2020-21.

4.19.10 The Petitioner submitted that the Commission had approved the sales and revenue at 2,473.57 MU and Rs. 2,049.03 Cr. respectively, based on various assumptions with respect to various factors like uninterrupted import of power, supply hours, load shedding hours, power factor, consumption under various time blocks etc., however, the actual sales and revenue vary because of variations in the parameters, as enumerated below, based on actual consumption and supply conditions.

4.19.11 The Petitioner submitted that prevailing Rate Schedule largely comprises of two components viz. demand charge based on connected load irrespective of actual consumption and energy charge which varies directly in proportion to actual consumption of the consumers. Thus, due to power supply, load factor of consumers, and various other reasons beyond the control of the Company, therefore, the actual sales, revenue and average billing realization (ABR) as per Audited Accounts will vary as compared to that approved vide Tariff Order dated August 26, 2021.

4.19.12 The Petitioner submitted that the Company maintains its books of accounts including billing register in SAP –ERP system which is one of the best ERP software and is now being used by many of the distribution companies apart from other business sectors. All billing parameters viz. the details of category / sub-category, rate schedule of the respective category / subcategory, other parameters applicable under each category, general clauses of rate schedule and provisions of Electricity Supply Code are configured in the SAP-ERP only. More than 95% of the meter reading is done through AMR, LPR and CMRI with no manual intervention, hence, the sales and revenue are automatically recorded / computed by the SAP-ERP system. The SAP-ERP generates the billing register for the purpose of preparation of bills, printing thereof, sales & consumers' ledgers and the Company prepares its Audited Financial Statement on the basis of such system generated sales register only.

4.19.13 The Petitioner submitted that in case of LMV-1 and LMV-5, unmetered sales are accounted based on consumption pattern / use of the electricity in the concerned area. There are 118 villages in Company's licensed area, which also has lot of migrant labour/ encroachers who often found indulging into theft of electricity. Apart from the above due to ongoing development activities, in many cases, the land though acquired by GNIDA, but continue to be utilised for farming activities by encroachers/ earlier occupants and indulge into pilferage of power, therefore, in order to curb theft of power and T&D Losses, the Company regularly conducts loss control drives in these areas to remove unauthorized tapings as well as recovery of sales through assessment under Section 126 read with 135 of the Act for unauthorized use/theft of Electricity which otherwise could not be accounted for. The amount so recovered against such cases has been accounted under the same category. Since, these are unauthorized connections, the amount assessed and recovered against electricity theft from such consumers under Section 126 read with 135 of the Act do not get reflected in the number of consumers and their consumption when computed on the basis of only authorised consumer numbers and connected load as mentioned in the forms prescribed by the Commission. Further, such assessed and recovered amount has also been included in the sales of LMV-1 and LMV-5 categories which the Commission has been wrongly considering as "Excess Sales".

4.19.14 The Petitioner submitted that the above treatment of accounting for assessed consumption in theft cases is in sync with the judgment of the Hon'ble APTEL as held in matter of Reliance Infrastructure Limited Vs. MERC & Ors. in Appeal No. 85 of 2012 wherein Hon'ble APTEL held as follows: -

Quote

7.11 We find that the assessment of electricity charges is made by the Assessing Officer as per the procedure laid down in the 2003 Act, after giving opportunity to the concerned person to file objection, if any, as against the provisional assessment. Only after affording opportunity of hearing to such person, the Assessing Officer passes the final order of assessment of the electricity charges payable by such person. The assessed electricity charges are made by the assessing officer after inspection of the premises or after inspection of equipments, gadgets machines, etc., connected at the premises or after inspection of records. The assessed electricity charges are based on the assessed power/energy consumption and is charged at twice the tariff applicable for the relevant category. Thus, the assessed energy has to be considered as supplied by the distribution licensee to the concerned person.

7.12 According to the State Commission, only the energy recorded in the meter is required to be considered for computation of distribution loss. We are not in agreement with the contention of the State Commission. A large number of agriculture consumers in the country are still being supplied electricity without meters. The consumption of such unmetered consumers are being assessed by the State Commission and considered as sale to agriculture consumers. The unauthorized use of electricity assessed by the Assessing Officer as per Section 126 of the Act is nothing but consumption of electricity supplied by the distribution licensee.

……………..

7.14 ***If the distribution licensee has plugged the energy "leakages" in the system through vigilance initiative, it has not only ensured that the recorded consumption would increase in future but has also ensured that the consumption not recorded in the meter in the past is also retrieved by charging the concerned person for such energy.***

7.15 <u>There is no dispute that the pilfered electricity has also been consumed and has been procured by the distribution licensee for distributing in its licensed area. The pilfered energy has not been recorded in the meter and can only be assessed</u>. Section 126 of the 2003 Act specifically provides for assessment of charges for unauthorized use of electricity. The rate for such charges is at twice the tariff applicable for the relevant category as approved by the State Commission. The charges will have to be *worked out by assessment of the electricity consumption by inspection of place or premises, inspection of equipments, gadgets, etc., found connected or used or after inspection of records, etc. as specified in Section 126 (1) of the Act. Therefore, the assessed energy has to be considered as consumed. If the licensee has been able to reduce the distribution losses with vigilance drive, it should be given the credit for efficiency gain if it helps in reducing the loss below the target level. Therefore, we hold that the assessed energy as a result of vigilance drive should be accounted for while computing the distribution loss.*

Unquote

4.19.15 The Petitioner submitted the details of the sales booked based on the assessment carried in accordance with the provisions of Electricity Supply Code 2005 as amended and sales booked against theft cases are as shown in table below:

TABLE 4-145: SALES BOOKED BASED ON NORMATIVE AND SALES BOOKED AGAINST THEFT CASES FOR FY 2021-22

Category	MUs	Rs. In Crore
LMV-1		
Sales on normative	8.17	2.82
Sales against theft	-	-
Total LMV-1	8.17	2.82
LMV-5		
Sales on normative	5.60	0.64
Sales against theft	0.07	0.01
Total LMV-5	5.67	0.65

4.19.16 The Petitioner requested the Commission to true-up the sales and revenue for FY 2021-22 including the unmetered sales for LMV-1 and LMV-5 category on the basis of Audited Annual Accounts.

Commission's Analysis

4.19.17 The category-wise approved revenue from sale of power for FY 2021-22 is provided in the Table below:

TABLE 4-146: REVENUE AS APPROVED BY THE COMMISSION FOR FY 2021-22

Sl. No.	Category	Sales (MU)	Revenue (Rs. Crore)	ABR (Rs./kWh)
1	LMV-1: Domestic Light, Fan & Power	694.48	464.53	6.69
2	LMV-2: Non Domestic Light, Fan & Power	41.45	46.89	11.31
3	LMV-3: Public Lamps	37.35	34.90	9.34
4	LMV-4: Institutions	12.25	10.60	8.66
5	LMV-5: Private Tube Wells	14.58	3.68	2.53
6	LMV 6: Small and Medium Power	100.70	103.59	10.29
7	LMV-7: Public Water Works	24.91	27.69	11.12
8	LMV-8: STW and Pumped Canals	0.06	0.21	32.52
9	LMV-9: Temporary Supply	45.96	57.06	12.42
10	LMV-11: Electric Vehicle Charging	0.00	0.00	0.00
11	HV-1: Non Industrial Bulk Power	216.13	237.70	11.00
12	HV-2: Large and Heavy Power	1,150.17	952.80	8.28
13	**Total**	**2,338.04**	**1,939.66**	**8.30**

4.19.18 The Commission observed that the Petitioner had considered the captive consumption for FY 2021-22 under category LMV 4(B). The Commission vide letter dated January 06, 2023 sought clarification from the Petitioner that whether or not the same is added in LMV-4(B) category. In reply, the Petitioner confirmed that captively consumed units are added in sales under LMV-4 (B) but the revenue is not included and revised the revenue as per table below:

Table 4-147:REVISED DETAILS OF CAPTIVE CONSUMPTION SUBMITTED BY NPCL

Month	Load	Consumption	Fixed Charges Rate	Energy Charges Rate	Fixed Charges	Energy Charges	Rebates	Total
	kW	kWh	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Mar-22	1,050	2,43,150	400	9.30	3,15,000	22,61,295	(25,763)	25,50,532
Feb-22	1,050	1,80,071	400	9.30	3,15,000	16,74,660	(19,897)	19,69,764
Jan-22	1,050	2,09,903	400	9.30	3,15,000	19,52,098	(22,671)	22,44,427
Dec-21	1,050	1,99,622	400	9.30	3,15,000	18,56,485	(21,715)	21,49,770
Nov-21	1,050	1,82,992	400	9.30	3,15,000	17,01,826	(20,168)	19,96,657
Oct-21	1,050	2,41,364	400	9.30	3,15,000	22,44,685	(25,597)	25,34,088
Sep-21	1,050	2,67,217	400	9.30	3,15,000	24,85,118	(28,001)	27,72,117
Aug-21	1,050	2,82,588	400	9.30	3,15,000	26,28,068	(29,431)	29,13,638
Jul-21	1,050	2,94,842	400	9.30	3,15,000	27,42,031	(30,570)	30,26,460
Jun-21	1,050	2,75,849	400	9.30	3,15,000	25,65,396	(28,804)	28,51,592
May-21	1,050	2,07,713	400	9.30	3,15,000	19,31,731	(22,467)	22,24,264
Apr-21	1,050	2,00,160	400	9.30	3,15,000	18,61,488	(21,765)	21,54,723
Total	**1,050**	**27,85,471**	**-**	**-**	**37,80,000**	**2,59,04,880**	**(2,96,849)**	**2,93,88,031**

4.19.19 The Petitioner further submitted the judgement of Hon'ble Tribunal which dealt with the issue of self/ captive consumption by a Distribution Licensee in the matter of Arun Kumar Datta Vs. DERC & Anr. in Appeal No.195 of 2013 [Judgement dated 09th February, 2015]. The Commission observed that the said judgement is regarding the BYPL has been simply taking own consumption arbitrarily without metering its own consumption and has been including the own consumption in energy sales figures for calculating AT&C loss, thus inflating the energy sales.

4.19.20 Further, the APTEL feel that the BYPL should have installed meters for self-consumption in all its offices, call centers, substations, etc and when the BYPL is including self-consumption in its energy sale figures, then it was legally bound to supply electricity for own consumption only through correct meters. The Commission observed that the above judgement is irrelevant to the context.

4.19.21 The Commission observed that the Petitioner has claimed captive consumption as part of energy sales towards the LMV 4(B) category and the revenue corresponding to the such sales has been considered NIL for FY 2021-22. Also, the Petitioner has submitted that all the connections used for the captive consumption purposes are metered in nature and energy consumption against these connections has been considered as energy sales since its inception. The Commission observed that the self / captive consumption in the case of State Discoms is billed under LMV-4(A)/ HV-1 category according to Connected Load. The same approach is also applied for NPCL.

4.19.22 The captive consumption of Petitioner has been considered as energy sales under LMV-4(B) category. The revenue from the energy sales attributable to captive consumption is computed by considering the approved tariff of LMV-4(B) works out to be Rs. 2.94 Crore as submitted by the Licensee.

4.19.23 The Petitioner has claimed additional O&M regarding the payment of the captive consumption of electricity bills, however, the Commission has already finalised the base values of O&M for the control period & hence it would not like to go into the merit of the matter at this stage and proceedings. Further, an Appeal filed by the Petitioner is pending before the Hon'ble APTEL in this matter. However, the deemed revenue is provisionally not being considered in this Tariff Order. The final treatment will be done as per the orders passed by Hon'ble APTEL in the above said Appeal.

4.20 TRUE-UP ARR AND REVENUE GAP

4.20.1 Based on above mentioned Revenue, Expenditure and Return on Equity, the Aggregate Revenue Requirement for FY 2021-22 as computed on the basis of the MYT Regulations, 2019 and Commission's Tariff Orders is given in Table below:

TABLE 4-148: SUMMARY OF ARR FOR TRUE UP SUBMITTED BY NPCL FOR FY 2021-22 (Rs. Crore)

Sl. No.	Particulars	Approved	Claimed in True Up
1	Power Purchase Expenses for the Year	1,044.51	1,485.06
2	Transmission Charges	200.46	150.26
3	Net Employee cost (Incl. Retiral Benefits)	21.25	59.29
4	A&G expenses	14.51	15.67
5	R&M expenses	39.16	53.97
6	Smart Metering / DT Metering / SOP implementation OPEX	-	Included Above
7	Interest Charges	57.14	64.30
8	Depreciation	46.12	56.37
9	Taxes (Income Tax & MAT)	19.03	24.10
10	Provision for Bad & Doubtful Debts	19.07	18.31
11	Loss on sale of Asset	-	2.92
12	Change in Law (Impact of GST)	-	-
13	Return on Equity	56.57	71.64
14	Contingency Reserve	-	4.44
15	**Annual Revenue Requirement**	**1,517.82**	**2,006.33**
16	Less: Revenue from Existing Tariff	2,049.03	1,939.66
17	Less: Revenue from Open Access Charges		0.10
18	Less: Non-Tariff Income	9.36	8.75
19	**Revenue Gap / (Surplus)**	**(540.57)**	**57.82**
20	Revenue Gap / (Surplus) from Prev. Year	(548.99)	(22.33)
21	Carrying Cost of Regulatory Asset	(87.25)	0.63
22	**Total Revenue Gap / (Surplus) carried forward**	**(1,176.81)**	**36.12**
Note: The sum and deduction may not match due to rounding off.			

Commission's Analysis:

4.20.2 Based on the above approvals, the summary of Aggregate Revenue Requirement, Revenue Gap / (Surplus) for the NPCL for FY 2021-22 is summarized below:

4.20.3 With regard to Contingency reserve claimed by the Petitioner, the Commission has been disallowing the contribution to contingency reserve in the past Tariff Orders as the same would put additional burden on the consumers. Continuing the same approach, the Commission for FY 2021-22 has not approved any fund for contingency reserve.

TABLE 4-149: SUMMARY OF ARR APPROVED BY COMMISSION FOR FY 2021-22 (Rs. Crore)

Particular	Tariff Order for FY 2021-22 dated 26.08.2021	Claimed in Petition	Approved Upon Truing Up
Power Purchase Expenses	1,044.51	1,485.06	1,384.92
Disallowance in PPC due to excess unmetered sales	-	-	0.62
Transmission Charges (UPPTCL+PGCIL)	200.46	150.26	150.92*
Employee cost	31.25	68.26	31.00
A&G expenses	14.51	15.67	15.67
R&M expenses	39.16	53.97	43.22
Smart Metering / DT Metering / SOP implementation OPEX	-	-	-
Gross O&M Expenses	**84.93**	**137.90**	**89.89**
Interest charges	57.15	64.30	50.70
Depreciation	46.12	56.37	38.73
Contingency Reserve	0.00	4.44	0.00
Income Tax	19.03	24.10	17.38
Gross Expenditure	**1,452.18**	**1,922.43**	**1,731.92**
Less: Employee cost capitalized	10.00	8.98	8.98
Less: Interest capitalized	0.00	0.00	0.00
Less: A&G expenses capitalized	0.00	0.00	0.00
Net Expenditure	**1,442.18**	**1,913.45**	**1,722.94**
GST Impact	0.00	0.00	0.00
Provision for Bad & Doubtful debts	19.07	18.31	17.48
Miscellaneous Expenses	0.00	2.92	0.00
Total net expenditure with provisions	**1,461.25**	**1,934.68**	**1,740.42**
Add: Reasonable Return / Return on Equity	56.57	71.64	51.66
Less: Non-Tariff Income	9.36	8.85	36.90
Add: Efficiency Gains	0.00	0.00	0.00
Annual Revenue Requirement (ARR)	**1,508.46**	**1,997.47**	**1,755.18**
Revenue from approved Tariffs	**2,049.03**	**1,939.66**	**1,939.66**
Revenue Gap/ (Surplus)	(540.57)	57.82	(184.48)

** Unscheduled Interchange (UI) is disallowed and the corresponding power is allowed from Power Exchange along with corresponding transmission charges.*

4.20.4 As observed from above Tables, against the revenue Gap claimed by the NPCL for truing up of FY 2021-22, the Commission has worked out the surplus for FY 2021-22 as shown above.

TABLE 4-150: SUMMARY OF ARR APPROVED BY COMMISSION FOR FY 2021-22 (Rs. Crore)

Parameters	FY 2020-21 (True up Approved)	FY 2021-22 (Approved)	%Change
Total Sales (MU)	2,014.56	2,338.04	16.06%
Revenue from Tariff (Rs. Crore)	1,679.78	1,939.66	15.47%
Total Power Purchase (MU)	2,344.24	2,711.39	15.66%
Total Power Purchase (Rs. Crore)	1,038.39	1,535.23	47.85%

Parameters	FY 2020-21 (True up Approved)	FY 2021-22 (Approved)	%Change
ARR (Rs. Crore)	1,252.27	1,755.18	40.16%
APPC- Ex-Bus (Rs./kWh)	3.78	5.11	35.19%
APPC Ex- Bus including Transmission (Inter + Intra) (Rs./kWh)	4.43	5.66	27.77%
ABR (Rs. /kWh)	**8.34**	**8.30**	**-0.48%**
ACoS (Rs./kWh)	**6.22**	**7.51**	**20.74%**

5 ANNUAL PERFORMANCE REVIEW OF FY 2022-23

5.1 INTRODUCTION

5.1.1 In this Chapter the Commission has carried out the Annual Performance Review for FY 2022-23 in line with the provisions of the MYT Regulations, 2019. Regulation 7 of the MYT Regulations, 2019 specifies that under the MYT framework, the performance of the Licensee shall be subject to APR as under:

Quote

7 Annual Performance Review

7.1 The Licensee shall file Petition for Annual Performance Review (APR) as provided in Regulation 4.1 of these Regulations:

Provided that the Petition shall include information in such form as may be prescribed by the Commission, together with the audited/ provisional Accounting Statements, extracts of books of account and such other details, etc., as per the Guidelines and Formats prescribed.

Unquote

5.1.2 The Commission in this Order has not carried out the detailed analysis of various components of APR for FY 2022-23. The Commission has carried out comparison of each component of APR as claimed by the Petitioner with that approved Tariff Order for FY 2022-23. The Commission will carry out the detailed prudence check of various components of ARR for FY 2022-23 while carrying out the truing up for FY 2022-23.

5.2 NUMBER OF CONSUMERS AND CONNECTED LOAD

Petitioner's Submission

5.2.1 The Petitioner has estimated that the number of Consumers & Connected load for FY 2022-23 are 1,38,840 and 1,426.62 MW, respectively, as given in the following Table:

TABLE 5-1: NO. OF CONSUMERS AND CONNECTED LOAD SUBMITTED BY THE PETITIONER FOR FY 2022-23 (APR)

Category	No. of consumers (No.)	Connected Load (MW)
LMV-1: Domestic Light, Fan & Power	126259	576.97
LMV-2: Non-Domestic Light, Fan & Power	4360	41.73
LMV-3: Public Lamps	453	12.20
LMV-4: Institutions	587	7.71
LMV-5: Private Tube Wells	1079	5.58
LMV 6: Small and Medium Power	3647	90.47
LMV-7: Public Water Works	297	12.98
LMV-8: STW and Pumped Canals	0	0.00
LMV-9: Temporary Supply	921	19.49
LMV-11: Electric Vehicle Charging	10	0.75
HV-1: Non-Industrial Bulk Power	264	159.49
HV-2: Large and Heavy Power	963	499.25
Total	**1,38,840**	**1,426.62**

5.2.2 The Petitioner has submitted that the projection of number of consumers and connected load was based on certain assumptions regarding various factors such as forthcoming development in area, Master Plan of Greater Noida Industrial Development Authority, consumer mix, etc., however, the actual number of consumers and connected load vary because of variations in the aforesaid parameters.

Commission's Analysis

5.2.3 The Commission observed that in the APR for FY 2022-23 under format F9 (billing determinant), the Petitioner in LMV-1 Rural unmetered category has claimed forecasted energy sales of 5.95 MU while the no. of consumer and connected load is Nil similarly, in LMV-8 forecasted energy sales is 0.03MU while the No. of consumers and connected load is Nil.

5.2.4 In this regard the Commission vide deficiency letter dated January 06, 2023 sought justification for such discrepancies, in reply the Petitioner submitted as follows:

LMV-1 Rural unmetered category:

In compliance to the Commission's direction vide Tariff Order dated July 20, 2022 to convert all unmetered connections under LMV-1 & LMV-5 categories to metered consumers by the end of March 31,2023, the Petitioner is making an all-out efforts to achieve the same. In line with its efforts, it has projected no. of consumer and connected load in LMV-1 Rural unmetered category as Nil at the end of FY 2022-23 i.e., March 31, 2023. Since it would be converting these Consumers from Unmetered to Metered category during the period of FY 2022-23, therefore, it has forecasted energy sales of 5.95MU during the period of conversion.

LMV-8:

5.2.5 Since, the Commission vide Tariff Order dated July 20, 2022 has merged LMV-8 category with LMV-7 category, accordingly it has considered the estimated sales in LMV-8 category till July, 2022 and consumer & connected load as NIL at the end of FY 2022-23 i.e., March 31, 2023.

5.2.6 The Commission has made a comparison of number of consumers as submitted by the Petitioner in True-Up for FY 2021-22 with the number of consumers submitted for FY 2022-23 as shown in the Table below:

TABLE 5-2: CATEGORY-WISE NO. OF CONSUMERS FOR FY 2022-23 SUBMITTED BY THE PETITIONER

Category	Claimed in True-up of FY 2021-22	Claimed in APR of FY 2022-23	Percentage Increase/Decrease
LMV-1: Domestic Light, Fan & Power	1,06,390.00	1,26,259.00	18.68%
LMV-2: Non-Domestic Light, Fan & Power	3,649.00	4,360.00	19.48%
LMV-3: Public Lamps	412.00	453.00	9.95%
LMV-4: Institutions	526.00	587.00	11.60%
LMV-5: Private Tube Wells	1,053.00	1,079.00	2.47%
LMV 6: Small and Medium Power	3,494.00	3,647.00	4.38%
LMV-7: Public Water Works	261.00	297.00	13.79%
LMV-8: STW and Pumped Canals	8.00	-	-100.00%
LMV-9: Temporary Supply	837.00	921.00	10.04%
LMV-11: Electric Vehicle Charging	-	10.00	-
HV-1: Non-Industrial Bulk Power	225.00	264.00	17.33%
HV-2: Large and Heavy Power	898.00	963.00	7.24%
Sub Total	**1,17,753.00**	**1,38,840.00**	17.91%

5.2.7 The Commission has also made a comparison of Energy demand (in MW) as submitted by the Petitioner in True-Up of FY 2021-22 along with the Energy demand as submitted by the Petitioner in APR for FY 2022-23, as shown in the Table below:

TABLE 5-3: CATEGORY WISE CONNECTED LOAD (MW) SUBMITTED BY THE PETITIONER FOR FY 2022-23

Category	Connected Load for FY 2021-22	Connected Load for FY 2022-23	Percentage Increase/Decrease
LMV-1: Domestic Light, Fan & Power	510.13	576.97	13.10%
LMV-2: Non-Domestic Light, Fan & Power	33.2	41.73	25.71%
LMV-3: Public Lamps	11.71	12.20	4.14%
LMV-4: Institutions	7.09	7.71	8.78%
LMV-5: Private Tube Wells	5.259	5.58	6.06%
LMV 6: Small and Medium Power	83.36	90.47	8.53%
LMV-7: Public Water Works	12.05	12.98	7.71%
LMV-8: STW and Pumped Canals	0.098	0.00	-100.00%
LMV-9: Temporary Supply	18.81	19.49	3.61%
LMV-11: Electric Vehicle Charging	0	0.75	-
HV-1: Non-Industrial Bulk Power	119.57	159.49	33.38%
HV-2: Large and Heavy Power	448.94	499.25	11.20%
Sub Total	**1,250.234**	**1,426.62**	**14.11%**

5.2.8 Further analysis of billing determinants for FY 2022-23 would be carried out during True-Up proceedings of FY 2022-23, subject to prudence check by the Commission.

5.3 ENERGY SALES

Petitioner's Submission

5.3.1 The Petitioner has submitted that to meet the rising demand of the Greater Noida area, they have requested UPPTCL to provide connectivity for additional 100 MW capacity from their upcoming substation at Sector-148 and Sector 123 Noida. The Feeders from Sector 148 were energized in February, 2021 and while the same from Sector 123 Substation were energized on September 07, 2022. The Petitioner's farsighted planning helped in serving the peak Demand of 592 MW during FY 2022-23, being witnessed on July 8, 2022 as compared to the peak demand of 522 MW in the previous year i.e., FY 2021-22. Based on the actual unaudited sales till September 30,2022 submitted by the Petitioner vide its email dated November 18, 2022, the Petitioner has estimated the sales for FY 2022-23 at 3039.13 MU which is within the range of 10% to the approved sales of 2780.19 MU.

TABLE 5-4: ENERGY SALES AND REVENUE APPROVED BY THE COMMISSION FOR FY 2022-23

Sl. No.	Category	Sales	Revenue	ABR
		(MU's)	(Rs. Crore)	(Rs/kWh)
1	LMV-1: Domestic Light, Fan & Power	852.78	532.83	6.25
2	LMV-2: Non-Domestic Light & Fan & Power	47.57	48.49	10.19
3	LMV-3: Public Lamps	37.87	34.40	9.08
4	LMV-4: Institutions	16.97	15.21	8.96
5	LMV-5: Private Tube Wells	20.45	3.77	1.84
6	LMV 6: Small and Medium Power	116.96	87.90	7.52
7	LMV-7: Public Water Works	26.69	22.99	8.59
8	LMV-8: STW and Pumped Canals	0.07		
9	LMV-9: Temporary Supply	52.29	48.81	9.33
10	LMV-11: Electric Vehicle Charging	5.19	3.41	6.57
11	HV-1: Non-Industrial Bulk Power	333.37	291.16	8.73
12	HV-2: Large and Heavy Power	1,269.96	917.91	7.23
13	**Sub Total**	**2,780.19**	**2,006.88**	**7.22**

Commission's Analysis

5.3.2 The Commission has made a comparison of Energy demand (in MW) as submitted by the Petitioner in True-Up of FY 2021-22 along with the Energy demand as submitted by the Petitioner in APR for FY 2022-23, as shown in the Table below:

TABLE 5-5: ENERGY SALES SUBMITTED BY THE PETITIONER FOR FY 2022-23 (MU)

Category	Submitted for FY 2021-22	Submitted for FY 2022-23	Percentage increase/ decrease
LMV-1: Domestic Light, Fan & Power	694.48	926.22	33.37%
LMV-2: Non-Domestic Light, Fan & Power	41.45	51.82	25.03%
LMV-3: Public Lamps	37.35	37.56	0.55%
LMV-4: Institutions	12.25	16.38	33.72%
LMV-5: Private Tube Wells	14.58	16.32	11.99%
LMV 6: Small and Medium Power	100.70	117.96	17.14%
LMV-7: Public Water Works	24.91	28.04	12.54%

Category	Submitted for FY 2021-22	Submitted for FY 2022-23	Percentage increase/ decrease
LMV-8: STW and Pumped Canals	0.06	0.03	-58.59%
LMV-9: Temporary Supply	45.96	52.17	13.52%
LMV-11: Electric Vehicle Charging	0.00	0.21	_
HV-1: Non-Industrial Bulk Power	216.13	341.97	58.22%
HV-2: Large and Heavy Power	1,150.17	1,450.44	26.11%
Total	**2,338.04**	**3,039.13**	**29.99%**

5.3.3 From the above Table, the Commission has observed that the Energy Sales for all the categories have increased except for LMV-8. The Petitioner has submitted that Commission vide its Tariff Order dated July 20, 2022 approved the Energy Sale for FY 2022-23 at 2,780.19 MU. The category wise sales approved for FY 2022-23 vis-à-vis sales as submitted for FY 2022-23 is shown in the Table below:

TABLE 5-6: CATEGORY-WISE ENERGY SALES FOR FY 2022-23 (MU)

S. No.	Category	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR	Percentage Increase / Decrease
1	LMV-1: Domestic Light, Fan & Power	852.78	926.22	8.61%
2	LMV-2: Non-Domestic Light, Fan & Power	47.57	51.82	8.94%
3	LMV-3: Public Lamps	37.87	37.56	-0.84%
4	LMV-4: Institutions	16.97	16.38	-3.48%
5	LMV-5: Private Tube Wells	20.45	16.32	-20.18%
6	LMV 6: Small and Medium Power	116.96	117.96	0.85%
7	LMV-7: Public Water Works	26.69	28.04	5.07%
8	LMV-8: STW and Pumped Canals	0.07	0.03	-64.57%
9	LMV-9: Temporary Supply	52.29	52.17	-0.23%
10	LMV-11: Electric Vehicle Charging	5.19	0.21	-95.92%
11	HV-1: Non-Industrial Bulk Power	333.37	341.97	2.58%
12	HV-2: Large and Heavy Power	1,269.96	1,450.44	14.21%
	Total	**2,780.19**	**3,039.13**	**9.31%**

5.3.4 Further analysis of Energy Sales for FY 2022-23 would be carried out during the True-Up of FY 2022-23 proceedings subject to prudence check by the Commission.

5.4 ENERGY BALANCE AND DISTRIBUTION LOSSES

Petitioner's Submission

5.4.1 The Petitioner submitted that the Commission vide its Business Plan Order dated November 26, 2020 and Tariff Order dated July 20, 2022 approved the distribution loss for FY 2022-23 as 7.70%.

5.4.2 The Petitioner further submitted that vide its affidavit dated November 01, 2022, it is making all efforts to achieve the distribution loss of 7.70% for FY 2022-23.

5.4.3 Accordingly, the Energy Balance for FY 2022-23, the distribution losses as submitted by the Petitioner, are shown in the Table below:

TABLE 5-7: ENERGY BALANCE ESTIMATED BY THE PETITIONER FOR FY 2022-23

Particulars	UOM	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
Energy Sale	MU	2,780.19	3,039.13
Total Energy Losses	%	7.70%	7.70%
	MU	231.93	253.53
	%	7.70%	7.70%
Energy Purchase	MU	3,012.12	3,292.66

Commission's Analysis

5.4.4 The Commission has observed that in the APR, the Energy Balance for FY 2022-23, Petitioner has shown Distribution Loss of 7.70%, which is as per the approved loss of 7.70%.

5.4.5 Further analysis of Energy Balance and Distribution Loss for FY 2022-23 would be carried out during True-Up proceedings subject to prudence check by the Commission.

5.5 POWER PROCUREMENT QUANTUM AND COST

Petitioner's Submission

5.5.1 The Petitioner submitted that considering, the above referred Energy Balance and power purchased during the period April, 2022 to September, 2022 has estimated the power purchase requirement for FY 2022-23 at 3292.66 MU at aggregate cost of Rs. 1927.76 Crore as detailed here-in-below: -

Power Procurement from LTPPA

5.5.2 The PPA with M/s Dhariwal Infrastructure Ltd. (DIL) was approved by the Commission vide its order dated April 20, 2016. During FY 2022-23, the drawl under the aforesaid LTPPA is estimated at 1273.98 MU which is equivalent to normative Availability of 85% specified in the Regulation 26, Generation Tariff Regulations, 2019 of UPERC.

5.5.3 The Petitioner submitted that the Commission vide Tariff Order dated September 21, 2022 approved the tariff for the LTPPA for the control period FY 2019-20 to FY 2023-24 as shown in Table below: -

TABLE 5-8: LTPPA TARIFF IN ORDER DATED 21.09.2022 (Rs./unit)

Financial Year	Fixed Cost	Energy Cost	Total
FY 2019-20	1.891	2.471	**4.362**
FY 2020-21	1.854	2.471	**4.325**
FY 2021-22	1.813	2.471	**4.284**
FY 2022-23	1.772	2.471	**4.243**
FY 2023-24	1.727	2.471	**4.198**
** Excluding charges for Additional Coal and Change in Law*			

5.5.4 The Petitioner has estimated the cost of power procured from DIL which is provided here-in-below table for approval of the Commission.

TABLE 5-9: LONG TERM POWER SUBMITTED BY THE PETITIONER FOR FY 2022-23

S.No	Description	UoM	Claimed in APR
1	Contracted Quantum at ex-Genco	MW	171
2	No of Days	Nos.	365
3	Hours	Nos.	24
4	Normative Availability	%	85%
5	***Units at Normative Availability***	***MU***	***1274.05***
6	Units at Ex-Bus (Forecast Schedule)	MU	1274.05
7	Inter-State Losses	%	3.49%
8	***Units at UP Periphery***	***MU***	***1229.54***
9	Intra-State Losses	%	3.27%
10	**Units at NPCL**	**MU**	**1189.33**
11	Fixed Cost	Rs. Crore	225.76
12	Variable Cost	Rs. kWh	314.82
13	Inter-State Trans. Charges	Rs. Crore	95.07
14	Intra-State Trans. Charges	Rs. Crore	29.35

S.No	Description	UoM	Claimed in APR
15	***Total Cost***	**Rs. Crore**	**664.00**

5.5.5 The Petitioner further submitted that the Inter-State Transmission Charges as shown in above table includes charges under POC Bill-3 as received from PGCIL in terms of Hon'ble CERC sharing regulation as detailed in Table below:

TABLE 5-10: ADDITIONAL TRANSMISSION CHARGES

S. No.	POC Bill date	POC bill period	Amount (in Rs. Crore)
1	29.04.2022	Oct'21-Dec'21	0.61
2	20.07.2022	Jan'22-Mar'22	14.64
3	20.10.2022	Apr'22-Jun'22	4.30

5.5.6 The Petitioner submitted that the above-mentioned fixed cost and variable cost have been estimated considering the tariff as approved by the Commission vide Tariff Order dated September 21, 2022.

Quote

………

SUMMARY OF DECISIONS OF THE COMMISSION:

a) *Additional Capitalization: To be approved by the Commission for FY 2019-20 to FY 2023-24 at the time of True-up for MYT Period 2019- 24.*

b) The levelized fixed charge rate works out to Rs. 1.80/kWh against the committed levelized fixed charge rate of Rs. 1.93/kWh ex-bus for 25 years in terms of PPA approval and MYT Order of the Commission with respect to power supply from DIL Unit 2 to NPCL.

c) ARR and Generation Tariff approved by the Commission for FY 2019-20 to FY 2023-24

Particulars	***Units***	***FY 2019-20***	***FY 2020-21***	***FY 2021-22***	***FY 2022-23***	***FY 2023-24***
Annual Fixed Charges for Contracted Capacity (187 MW)	*Rs. Crore*	*241.6*	*236.23*	*230.95*	*225.72*	*220.58*
Annual Fixed Charges for Contracted Capacity (187 MW)	***Rs./Unit***	***1.891***	***1.854***	***1.813***	***1.772***	***1.727***

Particulars	***Units***	***FY 2019-20***	***FY 2020-21***	***FY 2021-22***	***FY 2022-23***	***FY 2023-24***
Energy Charge Rate ex-bus (excluding the cost of Additional Coal and Change in Law events)	*Rs. Crore*	*315.68*	*314.82*	*314.82*	*314.82*	*315.68*
Energy Charge Rate ex-bus (excluding the cost of Additional Coal and Change in Law events)	***Rs./Unit***	***2.471***	***2.471***	***2.471***	***2.471***	***2.471***
Total of Fixed and Energy Charges	*Rs. Crore*	*557.27*	*551.05*	*545.77*	*540.54*	*536.26*
Total Tariff Per Unit for Contracted Capacity (187 MW)	*Rs./Unit*	*4.362*	*4.325*	*4.284*	*4.243*	*4.198*

Notes:

1.Capital cost of Rs. 1917.88 Crores as on 31.03.2019 as approved by the Commission in 1st True-up Order dated 22.11.2021 has been considered.

2.The levelized fixed charges has been computed based on CERC discounting rate of 13.10% and financial principles (i.e. Escalation in 0&M Expense, Interest on Working Capital, Depreciation, and Interest on Loan) as per Generation Tariff Regulations 2019 and Return on Equity as approved under Para 1.6.35 of this Order.

3.Auxiliary Energy Consumption has been considered at 8.5% as prescribed in Regulation 26 (v) of the Generation Tariff Regulations 2019.

4.The aforesaid approved rates for recovery of fixed charges are computed on the basis of NAPAF of 85%, subject to adjustments if any, in terms of Regulation 35 of Generation Tariff Regulations 2019.

d)In addition to the above tariff, the Petitioner is allowed to recover the payment of statutory charges viz; Tax on Income, water charges, water cess (if any), payment to Pollution Control Board, rates and taxes and Regulatory Fee paid to the Commission, as reimbursement, on production of details of actual payments made and duly supported with the certificate of the Statutory Auditors. For these payments, the amount pertaining to contracted capacity of NPCL will be considered. It is, however, clarified that all such claims and recoveries are subject to prudence *check by the Commission and truing-up based on actual payments made at the end of the Tariff Period.*

e) Incentive shall be calculated according to Regulations 35 of UPERC (Terms and Conditions of Generation tariff) Regulations, 2019.

…………………”

Unquote

5.5.7 The Petitioner submitted that as can be seen from the above, the tariffs approved vide Order dated September 21, 2022 are ex-Bus DIL's plant and transmission charges and losses from DIL's plant to NPCL Bus i.e. Inter-State injection charges and losses, Inter-State withdrawal charges and losses, Intra-State transmission charges and losses are applicable over and above such approved tariff along with coal escalation charges.

5.5.8 The Petitioner accordingly, has considered the Inter-State & Losses and Intra-State transmission losses and charges as applicable for the purpose of estimation of power purchase cost for FY 2022-23.

5.5.9 The Petitioner further submitted that the claim towards Additional Coal and Change in Law has not been included in the power purchase costs estimated for FY 2022-23 and the same would be claimed subsequently at the time of truing-up based on receipt of Bills from DIL.

5.5.10 The Petitioner submitted that, in addition to above, following petitions filed by DIL are also pending before the Commission for disposal:

- Petition No. 1830/2022 for seeking approval of capital expenditure on account of installation of DE-NOx system as 'Change in Law' event
- Petition No. 1798/2021 for truing-up of the 'Change in Law' claims of FY 2020-21
- Petition No. 1794/2021 for Prudence Check and use of Additional Coal in FY 2020-21
- Petition No. 1651/2020 for approval of capital expenditure on account of installation of FGD system as 'Change in Law' event

- Petition for truing-up of the 'Change in Law' claims of FY 2021-22
- Petition for Prudence Check and use of Additional Coal in FY 2021-22

5.5.11 The Petitioner submitted that any impact on the power purchase cost pursuant to the orders of the Commission in the above petitions would be consequently claimed by the Petitioner in the ARR / APR/ Truing-up petitions as the case may be.

Impact of GENCO Tariff Order dated September 21, 2022

5.5.12 The Petitioner further submitted that the Commission approved the LTPPA vide its order dated April 20, 2016 wherein it approved levelized Tariff @ Rs. 4.79/unit comprising Fixed Cost, Energy Charges and Inter-state transmission charges and losses for period of 25 years.

5.5.13 The Petitioner also submitted that the Commission vide aforesaid order also approved the DIL to raise invoices as per approved escalation indices as referred below –

Quote

From the above discussions, it is evident that although NPCL has submitted a commitment on fixed charges for 25 years but has not submitted firm view on variable cost for the term of the PPA as promised by them during the hearing. The undertaking submitted by the generator is only for the period till fuel supply agreement is executed. In view of the fact that whole case of NPCL is based on the levelized tariff of Rs. 4.79/kwh (for the period of 25 years), it becomes necessary to firm up the fixed as well as the variable part of the tariff. The table showing fixed charges for 25 years and confirmation that there would be no upward revision in the project cost ensures sanctity of fixed charge. Similarly the component of variable charge also require to be as per the commitment of levelized tariff of Rs. 4.79/kwh for the period of 25 years ***except for the variation due to CERC escalation rates, over and above the escalation rates taken in calculation of levelized tariff of Rs. 4.79/kwh, which would be additionally allowed in variable charge****. Such limitation on variable charge would mean that for the whole term of PPA if there ever is any short supply from SECL and the Seller has to procure fuel from alternative sources then he* *would bear the additional cost, if any, over the prevailing SECL price plus CERC escalation. In this manner, the consumer may be ensured to get power at a cheaper rate through this PPA as promised by the parties.*

Unquote

5.5.14 The Petitioner submitted that the Commission vide its Order dated February 5, 2019, approved the provisional tariff for LTPPA for the period FY 2016-17 to FY 2018-19. The relevant extract of the order is reproduced below: -

Quote

"4.2.12 A Comparison of the Fixed charges approved by the Commission with the PPA vis-à-vis claimed by the Petitioner and approved by the Commission in this Order is as follows in table 8:- "

TABLE 8: COMPARISON OF FIXED CHARGES AS APPROVED IN PPA VS CLAIMED BY THE PETITIONER (RS./KWH)

Particulars	***As per Fixed Charges approved in PPA***	***As Claimed in the MYT Petition***	***Revised submission as per capital cost as on Cut off date***	***Fixed Charges considering Refinancing Cost claimed in FY 2017-18***	***Fixed Charges approved by the Commission***
FY 2016-17	*2.11*	*2.08*	*2.05*	*2.05*	*2.05*
FY 2017-18	*2.06*	*2.02*	*1.94*	*1.99*	*1.99*
FY 2018-19	*2.02*	*1.95*	*1.9*	*1.9*	*1.9*
Levelized Fixed Tariff (25 years)	***1.93***	***1.93***	***1.86***	***1.87***	***1.87***

………..

4.2.13 Further, with regard to approval of energy charge, it is observed that he Petitioner has claimed energy charge based on quality of coal as per third party test analysis at plant. Energy charge on account of change in law and additional coal procured other than FSA Coal, will be dealt by the Hon'ble Commission separately vide Commission's Order 19.02.2018. ***On the FSA Grade coal, the Commission had already taken a view in the order dated 20.04.2016 read with Order dated 15.01.2016 while approving the PPA. Accordingly, the commission approves the***

energy charge same as approved in PPA considering allowable variation in CERC escalation rates and as per Tariff Regulations 2014*. Any claim with regard to additional energy charge on account of change in law and additional procurement of coal shall be dealt separately. ………*

4.2.14 The tariff approved above shall be subject to true up provisions based on the Tariff Regulations 2014. DIL will be required to submit all relevant details including actual figures on coal quality (GCV as received basis tested at plant) corresponding to each FY in the entire control period certified by an independent agency of repute for scrutiny of the Hon'ble Commission while truing up.

Unquote

5.5.15 The Petitioner submitted that the Commission has directed the DIL to raise bills on the basis of aforesaid order till next order is issued and the relevant extract of the order is reproduced below: -

Quote

5. IMPLEMENTATION OF ORDER

5.1 This Order shall be reckoned to have come into effect from respective 1st day of each year of the Multi year Tariff period of FY 2016-17 to FY 2018-19 and ***shall remain effective till further order.*** *DIL is entitled to raise the bills as per this order with necessary adjustments if any on receivable/refundable.*

Unquote

5.5.16 The Petitioner also submitted based on above approved rates and after considering coal price escalation as per approved Escalation Indices, the summary of Bills raised by DIL and Amount Claimed in True-up for FY 2019-20 to FY 2021-22 are provided in below: -

TABLE 5-11: LTPPA BILLS AND CLAIM (Rs. Crore)

Particulars	Ref.	FY 2019-20			FY 2020-21			FY 2021-22		
		Fixed Cost	Energy Cost	Total	Fixed Cost	Energy Cost	Total	Fixed Cost	Energy Cost	Total
Billed Amount	a	237.36	292.14	**529.5**	236.71	370.26	**606.97**	236.71	382.27	**618.98**
Rebate Availed	b	(3.56)	(3.47)	(7.03)	(3.55)	(1.32)	(4.87)	(3.55)	(3.11)	(6.66)

Particulars	Ref.	FY 2019-20			FY 2020-21			FY 2021-22		
		Fixed Cost	Energy Cost	Total	Fixed Cost	Energy Cost	Total	Fixed Cost	Energy Cost	Total
Claimed Amount	**c=a-b**	**233.8**	**288.67**	**522.47**	**233.16**	**368.94**	**602.1**	**233.16**	**379.16**	**612.31**

5.5.17 The Petitioner submitted that during, FY 2022-23, the Commission vide its order dated September 21, 2022 has approved the MYT ARR Petition of DIL for their control period FY 2019-20 to FY 2023-24, the approved Tariff for the same is summarized in below Table:-

TABLE 5-12: LTPPA TARIFF IN ORDER DT. 21.09.2022 (Rs. /unit)

Fin Year	Fixed Cost	Energy Cost*	Total
FY 2019-20	1.891	2.471	**4.362**
FY 2020-21	1.854	2.471	**4.325**
FY 2021-22	1.813	2.471	**4.284**
FY 2022-23	1.772	2.471	**4.243**
FY 2023-24	1.727	2.471	**4.198**
**Excluding charges for Additional Coal and Change in Law*			

5.5.18 The Petitioner also submitted that it has made necessary adjustment to provide for the impact of aforesaid Tariff Order dated September 21, 2022 in its APR for FY 2022-23 as summarized in below in Table:-

TABLE 5-13: LTPPA BILLS AND CLAIMS (Rs. Crore)

Particulars	Ref.	FY 2019-20			FY 2020-21			FY 2021-22		
		Fixed Cost	Energy Cost	Total	Fixed Cost	Energy Cost	Total	Fixed Cost	Energy Cost	Total
Billed Amount	A	237.36	292.14	**529.50**	236.71	370.26	**606.97**	236.71	382.27	**618.98**
Rebate Availed	B	(3.56)	(3.47)	(7.03)	(3.55)	(1.32)	(4.87)	(3.55)	(3.11)	(6.66)
Claimed Amount	**c=a-b**	**233.80**	**288.67**	**522.47**	**233.16**	**368.94**	**602.10**	**233.16**	**379.16**	**612.31**
Approved in TO dt. 21.09.22	D	240.02	279.34	519.36	234.68	321.40	556.08	229.49	306.42	535.91
Approved in TO dt. 21.09.22 (net of Rebate)	e=d-b	236.46	275.86	512.33	231.13	320.08	551.21	225.94	303.31	529.25
Claimed Amount to be adjusted	**f=e-c**	**2.67**	**(12.81)**	**(10.14)**	**(2.03)**	**(48.86)**	**(50.89)**	**(7.22)**	**(75.85)**	**(83.06)**
Carrying Cost on above	**G**	0.23	(1.11)	(0.88)	(0.11)	(2.56)	(2.67)	(0.34)	(3.60)	(3.95)
Claimed Amount to be adjusted along with Carrying Cost	**h=f+g**	**2.90**	**(13.92)**	**(11.02)**	**(2.13)**	**(51.42)**	**(53.55)**	**(7.56)**	**(79.45)**	**(87.01)**

5.5.19 The Petitioner also submitted that the Commission while Truing up for FY 2019-20 and FY 2020-21 vide Tariff Orders dated August 26, 2021 and July 20, 2022 respectively has not fully approved the cost of LTPPA as claimed by Petitioner, therefore, requested the Commission to approve the amount as claimed after considering the impact of Tariff Order dated September 21, 2022 along with carrying cost while approving the APR for FY 2022-23 as summarized in below Table:

TABLE 5-14: LTPPA BILLS AND CLAIM (Rs. Crore)

Particulars	Ref.	FY 2019-20			FY 2020-21			Total		
		Fixed Cost	Energy Cost	Total	Fixed Cost	Energy Cost	Total	Fixed Cost	Energy Cost	Total
Billed Amount	a	237.36	292.14	**529.5**	236.71	370.26	**606.97**	474.07	662.4	**1136.47**
Rebate Availed	b	(3.56)	(3.47)	(7.03)	(3.55)	(1.32)	(4.87)	(7.11)	(4.79)	(11.9)
Amount Claimed in True-up Petitions	**c=a-b**	**233.8**	**288.67**	**522.47**	**233.16**	**368.94**	**602.1**	**466.95**	**657.61**	**1124.56**
Adjustment to Claimed Amount	d	2.67	(12.81)	(10.14)	(2.03)	(48.86)	(50.89)	0.64	(61.67)	(61.03)
Adjusted Claim	e=c+d	**236.46**	**275.86**	**512.33**	**231.13**	**320.08**	**551.21**	**467.59**	**595.94**	**1063.54**
Approved in TO dt. 21.09.22 (net of Rebate)	**f=e-c**	**236.46**	**275.86**	**512.33**	**231.13**	**320.08**	**551.21**	**467.59**	**595.94**	**1063.54**
Trued-up in TO dt. 26.08.2021 & 20.07.2022	G	206.26	195.41	401.67	254.8	233.16	487.96	461.06	428.57	889.63
Amount remaining to be approved with respect to the claims made by the Company in its True-up Petitions	**h=e-g**	**30.2**	**80.46**	**110.66**	**(23.67)**	**86.92**	**63.25**	**6.53**	**167.38**	**173.91**
Carrying Cost on above	I	7.94	21.16	29.1	-3.38	12.42	9.04	4.56	33.58	38.14
Amount remaining to be approved with Carrying Cost	**j=h+i**	**38.14**	**101.62**	**139.76**	**-27.05**	**99.34**	**72.29**	**11.09**	**200.96**	**212.05**

5.5.20 The Petitioner requested to approve the carrying cost thereon as computed in below Table -:

TABLE 5-15: CARRYING COST ON IMPACT OF TO DT. 21.09.2022 (Rs. Crore)

Particulars	FY 2019-20	FY 2020-21	Total
Amount remaining to be approved with respect to the claims made by the Company in its True-up Petitions for Fixed Cost	30.20	(23.67)	6.53
Amount remaining to be approved with respect to the claims made by the Company in its True-up Petitions for Energy Cost	80.46	86.92	167.38
Amount remaining to be approved with respect to the claims made by the Company in its True-up Petitions	**110.66**	**63.25**	**173.91**
Carrying Cost for FY 2019-20 @ 14.46%	8.00	-	8.00
Carrying Cost for FY 2020-21 @ 9.57%	10.59	3.03	13.62
Carrying Cost for FY 2021-22 @ 9.50%	10.51	6.01	16.52
Total Carrying Cost	**29.10**	**9.04**	**38.14**

Power Procurement from MTPPA:

5.5.21 The Petitioner submitted during FY 2019-20, based on the load profile, the Petitioner tied-up following Medium Term Power through Competitive Bidding held on DEEP Portal in accordance with the Guidelines of Central Government:

TABLE 5-16: MEDIUM TERM PPAS DATED 23.01.2020

Seller	Capacity	Duration	Period	Composite Tariff at NPCL (Rs./kWh)	Nature
APPCPL (DoP, GoAP)	50 MW	RTC	Apr-Sep	5.46	Large Hydro
	25MW	4 Hrs	Oct-Nov		
	25MW	2 Hrs	Dec-Mar		
APPCPL (DoP, GoN)	25 MW	RTC	Apr-Sep		
	25MW	4 Hrs	Oct-Nov		
	25MW	2 Hrs	Dec-Mar		

TABLE 5-17: MEDIUM TERM PPAS DATED 30.12.2020 & 31.12.2020

Source	Capacity	Duration	Period	Composite Tariff at NPCL (Rs./kWh)	Nature
TPTCL (GoHP, H.P.)	45 MW	RTC	May-Sep	4.43	Large Hydro
APPCPL (GEL, H.P.)	15 MW	RTC	May-Sep		

5.5.22 The Petitioner submitted that the tariff discovered through bidding under Table 5 (A) i.e., Rs. 5.46 per unit landed at NPCL Bus was based on the then prevailing transmission charges and losses, and was duly approved by the Commission vide Order dated February 28, 2020 along with respective medium-term power purchase agreements.

5.5.23 The Petitioner further submitted that the tariff discovered through bidding under Table 5 (B) i.e. Rs. 4.43 per unit landed at NPCL Bus was also based on the then prevailing transmission charges and losses in terms of the bid documents. The above tariff along with the PPAs dated December 30, 2020 and December 31, 2020 were duly approved by the Commission vide Order dated May 10, 2021.

5.5.24 The Petitioner mentioned that the above tariff was based on the then prevailing transmission charges and losses and the same would subsequently be payable at actuals in accordance with Articles 5.5 and 5.6 of the above approved PPAs dated January 23, 2020, December 30, 2020 and December 31, 2020. The relevant extract of the MTPPA is reproduced below:

Quote

5.5 ***Obligations relating to transmission charges***

The Supplier shall be liable for payment of all charges, due and payable under Applicable Laws, for inter-state and intra-state transmission of electricity from the Point of Grid Connection to the Delivery Point. For the avoidance of doubt, the Parties expressly agree that inter-state and intra-state transmission of electricity shall be undertaken solely at the risk and cost of the Supplier and all liabilities arising out of any failure of inter-state and intra-state transmission shall, subject to the provisions of Clause 11.4.4, be borne by the Supplier. ***The Parties further agree that the obligation of the Supplier to pay the regulated charges for transmission of electricity shall be restricted to the tariffs and rates applicable on the Bid Date for and in respect of the Contracted Capacity and any differential arising from revision of the regulated tariffs and rates thereafter shall be payable or recoverable, as the case may be, by the Utility…***

*5.6 **Obligations relating to transmission losses***

*5.6.1 The Supplier shall be liable for the transmission losses in all inter-state and intra- state transmission of electricity from the Point of Grid Connection to the Delivery Point. For the avoidance of doubt, the Parties expressly agree that transmission of electricity shall be undertaken solely at the risk and cost of the Supplier and all liabilities arising out of any transmission losses on inter-state and intra-state transmission lines shall be borne by the Supplier**. The Parties further agree that the obligation of the Supplier to bear the transmission losses shall be restricted to the level of losses determined by the Central Commission as on the Bid Date for this Project and any differential (higher or lower) arising*** **from revision in the level of losses thereafter by the Central Commission shall be borne by the Utility……...**

Unquote

5.5.25 The Petitioner also submitted that the based on the applicable transmission charges and losses for Inter-State and Intra-State Transmission Utilities, it has estimated to procure 431.79 MU power in aggregate from above sources at the landed cost of Rs. 4.46/kWh as summarised in the Tables below:

TABLE 5-18: MEDIUM TERM POWER PURCHASE COST FOR GOAP FOR FY 2022-23

S.No	Description	UoM	Actual
1	Contracted Quantum at NPCL		
	a. Apr-Sep	MW	50
	b. Oct-Nov	MW	25
	c. Dec-Mar	MW	25
2	No of Days	-	
	a. Apr-Sep	Days	183
	b. Oct-Nov	Days	61
	c. Dec-Mar	Days	121
3	Hours	-	
	a. 00:24 hrs from Apr-Sep	Hrs	24
	b. 18:22 hrs from Oct-Nov	Hrs	4
	c. 18:20 hrs from Dec-Mar	Hrs	2

S.No	Description	UoM	Actual
4	Normative Availability	%	85%
5	**Units at Normative Availability**	**MU**	**196.99**
6	Utilisation of Capacity	%	76%
7	**Units at Ex-Bus**	**MU**	**188.41**
8	Inter-State Losses	%	3.41%
9	**Units at UP Periphery**	**MU**	**181.98**
10	Intra-State Losses	%	3.27%
11	**Units at NPCL**	**MU**	**176.03**
12	Fixed Cost	Rs.Crore	37.55
13	Variable Cost	Rs.Crore	44.01
14	Inter-State Trans. Charges	Rs.Crore	-
15	Intra-State Trans. Charges	Rs.Crore	4.15
16	**Total Cost#**	**Rs.Crore**	**85.72**
# Total may not tally due to rounding offs			

TABLE 5-19: MEDIUM TERM POWER PURCHASE COST FOR GON FOR FY 2022-23

S.No	Description	UoM	Actual
1	Contracted Quantum at NPCL	MW	
	a. Apr-Sep	MW	25
	b. Oct-Nov	MW	25
	c. Dec-Mar	MW	25
2	No of Days	-	
	a. Apr-Sep	Days	183
	b. Oct-Nov	Days	61
	c. Dec-Mar	Days	121
3	Hours	-	
	a. 00:24 hrs from Apr-Sep	Hrs	24
	b. 18:22 hrs from Oct-Nov	Hrs	4
	c. 18:20 hrs from Dec-Mar	Hrs	2
4	Normative Availability	%	85%
5	**Units at Normative Availability**	**MU**	**103.66**
6	Actual Utilisation	%	76%
7	**Units at Ex-Bus**	**MU**	**99.28**
8	Inter-State Losses	%	3.39%
9	**Units at UP Periphery**	**MU**	**95.90**
10	Intra-State Losses	%	3.27%

S.No	Description	UoM	Actual
11	**Units at NPCL**	**MU**	**92.77**
12	Fixed Cost	Rs. Crore	19.83
13	Variable Cost	Rs. Crore	23.07
14	Inter-State Trans. Charges	Rs. Crore	-
15	Intra-State Trans. Charges	Rs. Crore	4.15
16	**Total Cost#**	**Rs. Crore**	**46.02**
# Total may not tally due to rounding offs			

TABLE 5-20: MEDIUM TERM POWER PURCHASE COST FOR GOHP FOR FY 2022-23

S.No	Description	UoM	Actual
1	Contracted Quantum at NPCL (May-Sep)	MW	45
2	No of Days (May-Sep)	Days	153
3	Hours	Hrs	24
4	Normative Availability	%	85%
5	**Units at Normative Availability**	**MU**	**140.45**
6	Actual Utilisation	%	96%
7	**Units at Ex-Bus**	**MU**	**169.03**
8	Inter-State Losses	%	3.35%
9	**Units at UP Periphery**	**MU**	**163.36**
10	Intra-State Losses	%	3.27%
11	**Units at NPCL**	**MU**	**158.02**
12	Fixed Cost	Rs. Crore	23.86
13	Variable Cost	Rs. Crore	30.88
14	Inter-State Trans. Charges	Rs. Crore	-
15	Intra-State Trans. Charges	Rs. Crore	4.13
16	**Total Cost**	**Rs. Crore**	**58.87**

TABLE 5-21: MEDIUM TERM POWER PURCHASE COST FOR M/S GOODWIL FOR FY 2022-23

S.No	Description	UOM	Actual
1	Contracted Quantum at NPCL (May-Sep)	MW	15
2	No of Days (May-Sep)	Days	153
3	Hours	Hrs	24
4	Normative Availability	%	85%
5	**Units at Normative Availability**	**MU**	**46.82**
6	Actual Utilisation	%	9%
7	**Units at Ex-Bus**	**MU**	**5.33**
8	Inter-State Losses	%	3.41%
9	**Units at UP Periphery**	**MU**	**5.15**

S.No	Description	UOM	Actual
10	Intra-State Losses	%	3.27%
11	**Units at NPCL**	**MU**	**4.98**
12	Fixed Cost	Rs. Crore	0.86
13	Variable Cost	Rs. Crore	1.00
14	Inter-State Trans. Charges	Rs. Crore	-
15	Intra-State Trans. Charges	Rs. Crore	0.13
16	**Total Cost**	**Rs. Crore**	**1.99**

5.5.26 The Petitioner also submitted that the variance in approved power is uncontrollable in nature as the same has been incurred accordance with terms of approved PPAs. This is in line with Regulation 8.1 (d) of MYT Regulations, 2019 as reproduced below

Quote

8.1(d) Variation in the approved cost of power purchase from approved sources, subject to clauses in the power purchase agreement or arrangement approved by the Commission

Unquote

5.5.27 The Petitioner further submitted that the estimated power supply from suppliers GoAP, GoN and M/s GEL would be less than 85% of contracted capacity while the supply from GoHP has exceeded 85% of the contracted Capacity and refer to Medium Term Power Agreement for above sources which provide for Incentive and Damages as reproduced below: -

Quote

11.6 Incentive and Damages

11.6.1 In the event that the Availability in any month exceeds the Normative Availability, the Supplier shall, in lieu of a Fixed Charge, be entitled to an Incentive which shall be calculated and paid at the rate of 50 % (fifty per cent) of the Fixed Charge for Availability in excess of Normative Availability. Provided, however, that any Incentive hereunder shall be due and payable only to the extent of Despatch of the Power Station. For the avoidance of doubt and by way of illustration, in the event the Availability in any month shall exceed the Normative Availability by 3%

(three per cent) of the Contracted Capacity but the Despatch during that month shall exceed 1% (one per cent) of the Contracted Capacity, the Incentive payable hereunder shall be restricted to such 1% (one per cent) only.

11.6.2 In the event that Availability in any month is less than the Normative Availability, the Fixed Charge for such month shall be reduced to the extent of shortfall in Normative Availability and in addition, any reduction below the Normative Availability shall be multiplied by a factor of 0.25 (zero point two five) to determine the Damages payable for such reduction in Availability. For the avoidance of doubt, the Parties agree that the Damages to be deducted for any reduction in Normative Availability shall be 25% (twenty five per cent) of the Fixed Charge which is reduced on account of shortfall in Availability below Normative availability.

11.6.3 The Parties expressly agree that within 30 (thirty) days of the close of every Accounting Year, the cumulative monthly Availability for such year shall be determined and the Incentive or Damages, as the case may be, shall be computed with reference to the Normative Availability for that year. The amount so arrived at shall be adjusted against the Incentives or Damages determined for the respective months of the year and the balance remaining shall be adjusted in the following Monthly Invoice."

Unquote

5.5.28 The Petitioner further submitted that the full fixed charges are to be paid if the actual availability of the plant is more than Normative Availability of 85% and if the availability by the suppliers is more than normative availability @ 85% then supplier becomes eligible for incentives as per Article 11.6.1. Similarly, if the scheduled availability by the suppliers is less than 85% then the buyer is eligible to claim damage as per Article 11.6.2.

5.5.29 The Petitioner also submitted that the as per Article 11.6.3 the claim for Incentive and Damages are adjusted after close of the accounting year, therefore, at present it has not considered the Incentive / Damage in APR for FY 2022-23 and would be considering the same in Truing up petition for FY 2022-23 based on the final availability and utilization of the plant.

5.5.30 The Petitioner submitted the summary of estimated power procurement from medium term sources as per table below: -

TABLE 5-22: SUMMARY OF MEDIUM-TERM POWER FOR FY 2022-23

Seller	Units at NPCL (MU)	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Total Transmission Charges (Rs. Crore)	Total Cost at NPCL Bus	Landed Rate at NPCL Bus (Rs./kWh)
APPCPL- Govt. of AP	176.03	37.55	44.01	4.15	85.72	4.87
APPCPL- Govt. of Nagaland	92.77	19.83	23.07	3.11	46.02	4.96
APPCPL- GEL, HP	4.98	0.86	1.00	0.13	1.99	3.99
TPTCL- Govt of Himachal Pradesh	158.02	23.86	30.88	4.13	58.87	3.73
Total	**431.79**	**82.11**	**98.96**	**11.52**	**192.59**	**4.46**

Power Procurement from Short Term Sources:

5.5.31 The Petitioner submitted that the for the purpose of procurement of power for FY 2021-22 to meet the rising demand of the consumers, it has conducted competitive bidding on DEEP portal from time to time and submitted the results thereof to the Commission for adoption of tariff and approval of PPA. The summary of Short Term PPAs approved by the Commission is provided in below table: -

TABLE 5-23: APPROVED SHORT TERM POWER PURCHASE AGREEMENTS

<table>
<tr><th>Seller</th><th>Period</th><th>Duration</th><th>MW</th><th>Rate at CTU Periphery of Seller (Rs./kWh)</th><th>Approval Date</th></tr>
<tr><td rowspan="4">TPTCL (PPGCL)</td><td>01-30 Apr'22</td><td rowspan="4">00-04</td><td>25</td><td>4.03</td><td rowspan="9">01.04.2022</td></tr>
<tr><td>01-31 May'22</td><td>25</td><td>4.64</td></tr>
<tr><td>01 Jun'22 to 31 Aug'22</td><td>25</td><td>4.68</td></tr>
<tr><td>01 -20 Oct'22</td><td>25</td><td>4.78</td></tr>
<tr><td rowspan="4">TPTCL (JPL)</td><td>01-30 Apr'22</td><td rowspan="4">00-04</td><td>40</td><td>4.03</td></tr>
<tr><td>01-31 May'22</td><td>10</td><td>4.64</td></tr>
<tr><td>01 Jun'22 to 31 Aug'22</td><td>30</td><td>4.68</td></tr>
<tr><td>01 -20 Oct'22</td><td>25</td><td>4.78</td></tr>
<tr><td>TPTCL (JPL)</td><td>01 -20 Oct'22</td><td>00-24</td><td>55</td><td>4.86</td></tr>
</table>

Seller	Period	Duration	MW	Rate at CTU Periphery of Seller (Rs./kWh)	Approval Date
TPTCL (PPGCL)	01 -20 Oct'22	00-24	25	4.86	
APPCPL (DB Power)	01 -20 Oct'22	00-24	25	4.86	
TPTCL (PPGCL)	01-30 Apr'22	18-24	80	5.49	21.04.2022
	01 -20 Oct'22		25	5.50	
APPCPL (SEIPL)	01-31 May'22	18-24	20	8.00	
	01 Jun'22 to 31 Aug'22		25	8.00	
	01-30 Sep'22		15	8.00	
APPCPL (Adhunik Power)	18 Jul to 30 Sep'22 (excl. Sunday)	00-24	25	6.31	22.07.2022
MPL (BLA Power)	18 Jul to 30 Sep'22 (excl. Sunday)	00-24	25	6.31	
PTC (Adhunik Power)	01-31 Jan'23 (excl. Sunday)	00-24	25	6.22	Petition (no. 1872/2022) submitted for approval of Tariff
	01-28 Feb'23 (excl. Sunday)		35	6.22	
TPTCL (Tata Power)	01-31 Jan'23 (excl. Sunday)	00-24	55	6.49	
	01-28 Feb'23 (excl. Sunday)		25	6.67	

5.5.32 The Petitioner further submitted that in aggregate estimates to procure 252.44 MU at Rs. 6.66 per unit from approved short term PPAs as detailed in below table:

TABLE 5-24: SUMMARY OF SHORT TERM POWER FOR FY 2022-23

Sellers	Units at NPCL (MU)	Energy Charges (Rs. Crore)	Transmission Charges (Rs. Crore)	Total Cost at NPCL Bus	Landed Rate at NPCL Bus (Rs./kWh)
TPTCL (Source-PPGCL, Uttar Pradesh)	15.56	7.19	0.54	7.74	4.97
TPTCL (Source-JPL,Chhattisgarh)	16.33	7.75	0.50	8.26	5.06
TPTCL (Source-JPL,Chhattisgarh)	24.69	12.57	0.66	13.23	5.36
TPTCL (Source-PPGCL, Uttar Pradesh)	11.37	5.60	0.01	5.60	4.93
APPCPL (Source-Adhunik) (0-24 Hrs)	29.95	19.81	0.85	20.66	6.90
MPL (Source- BLA) (0-24 Hrs)	29.04	19.21	0.85	20.07	6.91
TPTCL (Source-PPGCL, Uttar Pradesh)	16.72	9.36	0.59	9.94	5.95
APPCPL (Source-Sembcorp)	17.14	14.37	0.54	14.91	8.70
APPCPL (Source-DB Power) (00-24 Hrs)	11.22	5.72	0.94	6.66	5.93
PTC (Source-Adhunik) (0-24 Hrs)	33.85	23.16	2.87	26.03	7.69

Sellers	Units at NPCL (MU)	Energy Charges (Rs. Crore)	Transmission Charges (Rs. Crore)	Total Cost at NPCL Bus	Landed Rate at NPCL Bus (Rs./kWh)
TPTCL (Source- Tata Power) (0-24 Hrs)	46.59	31.77	3.16	34.94	7.50
Total	**252.44**	**156.52**	**11.52**	**168.04**	**6.66**

5.5.33 The Petitioner also submitted that the variance in approved power is uncontrollable in nature as the same has been incurred accordance with terms of approved PPAs. This is in line with Regulation 8.1 (d) of MYT Regulations, 2019 as reproduced below:

Quote

8.1(d) Variation in the approved cost of power purchase from approved sources, subject to clauses in the power purchase agreement or arrangement approved by the Commission

Unquote

5.5.34 The Petitioner also submitted that in line with direction of the Commission, it met its remaining power requirement of 862.20 MU through purchase from Power Exchange / DEEP Portal at average estimated cost of Rs. 8.24 per unit.

5.5.35 The Petitioner submitted that the it has estimated cost of power to be procured from Power Exchange / DEEP Portal on the basis of average prices discovered at IEX during recent period Jul-Sep'22 as provided in below Table below :-

TABLE 5-25: SUMMARY OF POWER EXCHANGE RATES

Type	Hrs	Jul-22	Aug-22	Sep-22	Average
Peak	**18-23 hrs**	9.31	8.64	9.19	9.05
Night	**00-04 & 23-24**	6.04	4.85	5.43	5.44
Off peak	**07-19 hrs**	3.78	3.98	4.52	4.10
RTC	**00-24 hrs**	5.41	5.17	5.63	5.40

5.5.36 The Petitioner further submitted the overall procurement of power from short term sources during FY 2022-23 is estimated at 1,114.65 MU at average cost of Rs. 7.90 per unit which is given in below table for approval of the Commission.

TABLE 5-26: SHORT TERM POWER FOR FY 2022-23

Description	Claimed in APR		
	Units	Rate/kWh	Amount
TPTCL (Source-PPGCL, Uttar Pradesh)	15.56	4.97	7.74
TPTCL (Source-JPL,Chhattisgarh)	16.33	5.06	8.26
TPTCL (Source-JPL,Chhattisgarh)	24.69	5.36	13.23
TPTCL (Source-PPGCL, Uttar Pradesh)	11.37	4.93	5.60
APPCPL (Source-Adhunik) (0-24 Hrs)	29.95	6.90	20.66
MPL (Source- BLA) (0-24 Hrs)	29.04	6.91	20.07
TPTCL (Source-PPGCL, Uttar Pradesh)	16.72	5.95	9.94
APPCPL (Source-Sembcorp)	17.14	8.70	14.91
APPCPL (Source-DB Power) (00-24 Hrs)	11.22	5.93	6.66
PTC (Source-Adhunik) (0-24 Hrs)	33.85	7.69	26.03
TPTCL (Source- Tata Power) (0-24 Hrs)	46.59	7.50	34.94
Subtotal	**252.44**	**6.66**	**168.04**
Power Purchase from DEEP / Exchange	862.14	8.24	710.59
Total	**1,114.59**	**7.88**	**878.63**

Power Procurement from Renewable Sources:

5.5.37 The Petitioner submitted that during FY 2022-23, it has estimated to procure 516.23 MU power from long term and short-term renewable sources as per the following details: -

- 1.30 MU @ Rs. 7.00 per kWh is estimated to be procured from Long Term Power Purchase Agreement for 1 MWp Solar power with Greater Noida Industrial Development Authority (GNIDA) as per the PPA approved by the Commission vide its order dated July 14, 2015.
- 33.92 MU @ Rs. 3.84 per kWh is estimated to be procured from Long Term Power Purchase Agreement for 10 MW Wind power with PTC India Limited signed on June 27, 2017 duly approved by the Commission vide its Order Dated January 05, 2018.
- The Petitioner has also granted several connections under the net- metering policy approved by the Commission in its Roof-top Solar PV Regulation 2015. It receives energy from such net metering consumers during FY 2022-23 but the

same cannot be ascertained at present, therefore, the it will consider the same at the time of True-up in its power purchase quantum for FY 2022-23.

- The Petitioner in order to meet its RPO obligation entered into an agreement on January 06, 2017 with M/s APPCPL for procurement of entire power generated from the Rooftop Solar Generating Plant of 370 +/-20% KWp at the Rooftops of the Appellant's 33/11 kV Substations located in Greater Noida. The Tariff agreed between the parties was based on the then discovered rate in UP State's tender for setting up of 500 MW Rooftop Solar PV Project by Solar Energy Corporation of India Ltd (SECI). Accordingly, it submitted its letter no. P-77A/ 249 dated October 27, 2016 to the Commission that the installation of rooftop Solar PV projects on its various sub-stations / office buildings will also enable it in executing its DSM Plan. Subsequently, vide letter no. P-77A/314 dated March 17, 2017 it duly intimated the Commission after execution of the agreement as well as reiterated the same during various suo-moto proceedings held by the Commission for fulfilment of RPO Obligations by DISCOMs in UP. Copies of Letter dated October 27, 2016 and March 17, 2017 are annexed hereto. Further, aforesaid power procurement was also duly approved by the Commission while approving the Business Plan vide its MYT Order dated November 30, 2017 and also while approving ARR for FY 2018-19 and ARR for FY 2019-20 vide Tariff Orders dated January 22, 2019 and September 03, 2019 respectively. It was also approved while truing-up ARR for FY 2016-17, ARR for FY 2017-18 and ARR for FY 2018-19 vide Tariff Orders dated January 22, 2019 and September 03, 2019 and December 04, 2020 respectively. During FY 2022-23, the Petitioner estimate to procure 0.46 MU @ Rs. 5.44/ kWh.
- Long Term Power Purchase Agreement for 25 MW Solar power each have been signed with M/s Tata Power and M/s Adani Energy which have been duly approved by the Commission vide its order dared September 18, 2019 and it has estimated to procure long-term solar power of 43.39 MU @ Rs 3.21/ kWh from Tata power and 51.43 MU @ Rs 3.22/kwh from Adani Solar during FY 2022-23.

5.5.38 The Petitioner further submitted that with M/s Tata Solar and M/s Adani Solar it has long term PPA for purchase of solar power have filed petitions for additional claim as follows:

a) Petition No. 1665/2021 claiming imposition of Safeguard Duty as Change in Law;

b) Petition No. 1711/2021 claiming extension in Commercial Operation Date;

c) Petition No. 1741/2021 claiming imposition of Safeguard Duty as Change in Law;

d) Petition No. 1753/2021 claiming additional amount prior to the scheduling of power.

5.5.39 The Petitioner also submitted that any amount claimed by M/s Tata Solar and M/s Adani Solar subsequent to disposal of above petitions by the Commission would be included in our subsequent ARR petitions.

5.5.40 The Petitioner submitted that the requirement of power to meet demand of the consumers as well as RPO Obligation, it has conducted competitive bidding on DEEP portal and submitted the results thereof to the Commission for adoption of tariff and approval of PPA. The summary of Short Term PPAs approved by the Commission is provided in Table below: -

TABLE 5-27: APPROVED SHORT TERM RE NON SOLAR & HYDRO POWER PURCHASE AGREEMENTS

<table>
<tr><th>Seller</th><th>Period</th><th>Duration</th><th>MW</th><th>Rate at CTU Periphery of Seller (Rs./kWh)</th><th>Approval Date</th></tr>
<tr><td>KEIPL (E&PD, Govt. of Sikkim)</td><td>01 May'22 to 30 Jun'22</td><td>00-07 & 10-24</td><td>25</td><td>5.20</td><td rowspan="4">12.04.2022</td></tr>
<tr><td rowspan="3">PTC (Singoli)</td><td>01 May'22 to 30 Jun'22</td><td rowspan="3">00-07 & 10-24</td><td>25</td><td>5.20</td></tr>
<tr><td>01 Jul'22 to 31 Jul'22</td><td>25</td><td>5.10</td></tr>
<tr><td>01 Aug'22 to 30 Sep'22</td><td>25</td><td>5.20</td></tr>
<tr><td>KEIPL (E&PD, Govt. of Sikkim)</td><td>01 Jul'22 to 30 Sep'22</td><td>00-07 & 10-24</td><td>25</td><td>5.20</td><td rowspan="2">17.05.2022</td></tr>
<tr><td>APPCPL (MePDCL)</td><td>01 Jul'22 to 31 Jul'22</td><td>00-07 & 10-24</td><td>25</td><td>5.10</td></tr>
<tr><td>PTC (NSL)</td><td>01 Nov'22 to 31 Mar'22</td><td>00-24</td><td>15</td><td>5.60</td><td rowspan="2">28.10.2022</td></tr>
<tr><td>PTC (BASL)</td><td>01 Nov'22 to 31 Mar'22</td><td>00-24</td><td>10</td><td>6.00</td></tr>
</table>

5.5.41 The Petitioner submitted that on receiving approval from the Commission, it estimated to procure 252.30 MU power from above-referred PPAs.

5.5.42 The Petitioner further submitted that, in-line with the directions of Commission in the Tariff Order dated August 26,2021, it has estimated to purchase 167.34 MU non-solar renewable power at Rs. 7.80 per kWh landed at NPCL bus from Green Term Ahead Market (GTAM) of Power Exchanges for meeting its RPO.

5.5.43 The Petitioner submitted during FY 2022-23 it estimates to procure 516.23 MU renewable power as summarized in below table: -

TABLE 5-28: RENEWABLE POWER FOR FY 2022-23

Description	Claimed in APR		
	Units	Rate/kWh	Amount
PTC Hydro Power (SB-HEP, Uttarakhand)	**75.06**	5.69	42.71
KEIPL Non-Solar (Power Department, Govt. of Sikkim)	**46.36**	5.72	26.54
APPCPL Non-Solar (Source-MePDCL)	**12.60**	5.62	7.08
Non-Solar Power(PTC - NSL)	**50.61**	7.03	35.59
Non-Solar Power(PTC - Bannari)	**33.74**	7.04	23.74
Wind Power (PTC)	**33.92**	3.84	13.03
Solar Power (GNIDA)	1.30	7.00	0.91
Solar Power (Adani Solar ECOL)	51.43	3.22	16.54
Solar Power (Tata Power)	43.39	3.21	13.95
Solar Power (APPCPL)	0.46	5.44	0.25
Subtotal	**348.89**	**5.17**	**180.34**
Power Exchange	167.34	7.80	130.56
Total	**516.23**	**6.02**	**310.91**

5.5.44 The Petitioner further based on procurement of renewable power, computed the status of RPO in accordance with RPO Regulations at the end of FY 2022-23 is provided in Table below: -

TABLE 5-29: RPO STATUS FOR FY 2022-23 (MU's)

RE Power	Opening Unfulfilled Obligation	Obligation for the year	Obligation met during the year*	Balance Obligation Carried Forward
	A	b	c	d=a+b-c
Solar	23.48	130.37	135.21	18.63
Non-Solar	92.60	156.44	344.58	(95.54)
Hydro Power	43.65	78.22	75.06	46.80
Total#	**159.73**	**365.03**	**544.86**	**(30.10)**

** Including gross generation under net-metering arrangements*
 # Total may not tally due to rounding offs

5.5.45 The Petitioner further submitted that the Commission in the Tariff Order dated July 20, 2022, while Truing up the ARR for FY 2020-21, has revised the methodology of computing RPO by considering the ex-bus energy purchased. The relevant extract of the order is as below:

Quote

4.5.100 Till, FY 2019-20, the Commission had been computing the RPO compliance considering the sales. The Commission is of the view that RPO compliance has to be computed on total consumption of energy at ex-bus and not on sales as done till FY 2019-20. Therefore, from FY 2020-21 onwards, the Commission deems it fit to revise methodology of computing RPO by considering the ex-bus energy purchased by NPCL. As the true-ups for the previous years' upto FY 2019-20 had already been carried out, the RPO compliance computed by the Commission for the period upto FY 2019-20 shall not be revised on account of the change in methodology.

Unquote

5.5.46 The Petitioner further submitted that the Commission has changed the methodology of RPO computation from "consumption units" to "power purchase units" at ex-bus contrary to its own UPERC (Promotion of Green Energy through Renewable Purchase Obligation) Regulations, 2010 as amended from time to time. On this aspect, it has filed an Appeal No. 398 of 2022, and therefore, for the purpose of computation of RPO, it has considered the methodology as adopted by the Commission in its preceding Tariff Orders.

DSM / UI/ Sale of Power:

5.5.47 The Petitioner submitted that it is highly uncertain or in-fact not feasible to exactly estimate the day-ahead power requirement as the demand is highly volatile, uncertain and dependent on a number of factors which are beyond its control e.g. volatile weather conditions, long intermittent holidays on account of various festivals, Govt. holidays etc. There can be certain time-blocks wherein the power tied-up may remain unutilised and thus, need to be settled in accordance with the DSM Regulations as per the rates prevailing in the power exchange during that particular time-block and respective frequency. It has estimated to incur Rs. 34.72 Crore towards 40.71 MU power net of Underdrawl / Overdrawl settled under DSM Regulations which is approximately 1.25% of the power purchase quantum and 1.80% of power purchase cost.

5.5.48 The Petitioner further submitted that the MYT Regulations also provides for power drawl under DSM mechanism. Regulation 14.7 of the MYT Regulations, 2019 states as follows:

Quote

14.7 In the regime of Availability Based Tariff (ABT), the cost of power purchase through Deviation Settlement Mechanism (DSM) shall be allowed to be passed through in Tariff of the subsequent year subject to the following condition:

(a) The Average rate for power purchased through DSM should not exceed the maximum rate for power purchased under the Merit order of the licensee as approved by the Commission.

(b) The total cost of Electricity units purchased through DSM shall be restricted to 10% of total power purchase cost approved by the Commission

Unquote

5.5.49 The Petitioner further stated that the power procurement cost from DSM is well within the overall limit of 10% of power purchase cost and is just 1.24 % of overall power purchase cost and requested to approve the cost of power settled under DSM mechanism.

5.5.50 The Petitioner also submitted that the Commission vide its order dated July 20,2022 Trued up the ARR of UPPTCL for FY 2020-21. Based on the said order, UPPTCL raised invoice for Rs. 3.87 Crore which has been paid and considered in its APR for FY 2022-23.

5.5.51 The Petitioner submitted the summary of estimated Power Purchase Cost for FY 2022-23 as claimed in APR for FY 2022-23 vis-à-vis provisionally approved by the Commission vide Tariff Order dated July 20, 2022, is given in below table for approval of the Commission: -

TABLE 5-30: TOTAL POWER PURCHASE COST FOR FY 2022-23

Sl. No.	Item	Approved			Actual/ Claimed in APR		
	Retail Sales (MU's)	2,780.19			3039.13		
	Source of Power Purchase	**MU's**	**Rs. / kWh**	**Amount Rs. Cr.**	**MU's**	**Rs. / kWh**	**Amount Rs. Cr.**
1	Long Term –Genco	1192.46	5.16	615.00	1189.27	5.59	664.98
2	Genco T.O. Impact	-	-	-	-	-	(157.97)
3	Medium Term	486.41	4.94	240.52	431.79	4.46	192.59
4	Short Term (Approved)	109.28	6.00	65.59	252.44	6.66	168.04
5	Power Exchange	640.35	5.25	335.92	862.20	8.24	710.63
6	Renewable Energy	583.62	4.70	274.33	516.23	6.02	310.91
7	UI/Sale	0.00	0.00	0.00	40.71	8.53	34.72
8	UPPTCL True-up Arrear (FY 2020-21) as per UPPTCL Tariff order dt. 20.07.2022	-	-	-	-	-	3.87
9	**Total Power Purchase Cost**	**3012.12**	**5.08**	**1531.36**	**3292.66**	**5.84**	**1927.77**

5.5.52 The Petitioner submitted that the total Power Purchase Cost considered for APR FY 2022-23 is Rs. 1,927.77 Crore which includes Inter-State and Intra-State Transmission charges of Rs. 227.47 Crore.

5.5.53 The Petitioner further requested the Commission to approve the estimated Power Purchase Cost of Rs. 1,927.77 Crore in full for FY 2022-23 alongwith the amount of Rs. 212.05 Crore towards the impact of Tariff Order dated September 21,2022 alongwith carrying cost for FY 2019-20 and FY 2020-21.

Commission's Analysis

5.5.54 The Commission will carry out the detailed analysis of Power purchase expenses for FY 2022-23 at the time of Truing-Up, subject to prudence check by the Commission.

5.6 OPERATION AND MAINTENANCE EXPENSES (O&M EXPENSES)

Petitioner's Submission

5.6.1 Operation and Maintenance (O&M) expenses comprises of Employee related costs, Administrative and General (A&G) expenses and Repair and Maintenance (R&M)

expenditure.

5.6.2 Regulation 45 of MYT Regulations, 2019 specifies as under:

Quote

"45 Operation and Maintenance Expenses

a) The Operation and Maintenance expenses for the Distribution Business shall be computed as stipulated in with these Regulations.

b) The Operation and Maintenance expenses shall be derived on the basis of the average of the Trued-Up values (without efficiency gain / loss) for the last five (5) financial years ending March 31, 2019 subject to prudence check by the Commission. However, if Trued-Up values (without efficiency gain / loss) are not available for FY 2018-19, then last five (5) available Trued-Up values (without efficiency gain / loss) will be considered and subsequently when the same are available the base year value (i.e., FY 2019-20) will be recomputed

c) The average of such operation and maintenance expenses shall be considered as Operation and Maintenance expenses for the middle year and shall be escalated year on year with the escalation factor considering CPI and WPI of respective years in the ratio of 60:40, for subsequent years up to FY 2019-20.

d)The One-time expenses such as expense due to change in accounting policy, arrears paid due to Pay Commissions, etc., and the expenses beyond the control of the Distribution Licensee such as dearness allowance, terminal benefits, etc., in Employee cost, shall be allowed by the Commission over and above normative Operation & Maintenance expenses after prudence check.

(e) At the time of Truing-up of the O&M expenses, the actual point to point inflation over Wholesale Price Index numbers as per Office of Economic Advisor of Government of India and the actual Consumer Price Index for

Industrial Workers (all India) as per Labour Bureau, Government of India, in the concerned year shall be considered.

45.1 Employee Cost

Employee cost shall be computed as per the following formula escalated by consumer price index (CPI), adjusted by the provisions for expenses beyond the control of the licensee and one-time expected expenses, such as recovery/adjustment of terminal benefits, implications of pay commission, arrears, Interim Relief, etc.:

$$EMP_N = EMP_{N-1} \times (1+CPI\ inflation)$$

Where:

EMP_N: *Employee expense for the* n^{th} *year;*

EMP_{N-1}: *Employee expense for the* $(n-1)^{th}$ *year;*

CPI inflation is the average of the Consumer price Index (CPI) for Immediately preceding three financial years

45.2 Repairs and Maintenance Expense

Repair and Maintenance expense shall be calculated as per the following formula:

$$R\&M_n = R\&M_{n-1}\ (1+ WPI\ inflation)$$

Where:

$R\&M_n$: *Repairs & Maintenance expense for* n^{th} *year;*

$R\&M_{n-1}$: *Repairs & Maintenance expense for the* $(n-1)^{th}$ *year;*

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years.

45.3 Administrative and General Expense

A&G expense shall be computed as per the following formula escalated by the Wholesale Price Index (WPI) and adjusted by provisions for confirmed initiatives (IT, etc., initiatives as proposed by the Transmission Licensee and validated by the Commission) or other expected one-time expenses:

$$A\&G_n = A\&G_{n-1}\ (1+ WPI\ inflation)$$

Where:

$A\&G_n$: *A&G expense for the* n^{th} *year;*

$A\&G_{n-1}$: *A&G expense for the* $(n-1)^{th}$ *year;*

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years:

Provided that Interest and Finance charges such as Credit Rating charges, collection facilitation charges, financing cost of Delayed Payment Surcharge and other finance charges shall be a part of A&G expenses.

Illustration: For FY 2020-21, (n-1)th year will be FY 2019-20 which is also the base year"

Unquote

5.6.3 The Petitioner submitted that the Commission while approving the O&M Expenses in ARR for FY 2022-23 in its Tariff Order dated July 20, 2022 computed the normative O&M expenses for base year on the basis of trued-up O&M expenses of FY 2015-16 to FY 2019-20 and has done some inadvertent arithmetical errors while computing normative O & M Expenses for this control period which are as follows:

i. Error in computation of Employee Expenses based on net trued-up employee expenses for FY 2015-16 & FY 2016-17 i.e. after deduction of employee expenses capitalized instead of gross trued-up employee expenses;

ii. Error in computation of A&G Expenses based on trued-up expenses for FY 2015-16 to FY 2019-20 without considering the following:

   a) Expenses incurred for compliance of directives of the State Commission,
   b) Impact of Service Tax
   c) Impact of Goods & Service Tax and
   d) Cost of Borrowing of DPS

5.6.4 The Petitioner further submitted that up to FY 2016-17 the O&M Expenses were trued -up by the Commission in accordance with UPERC Distribution Tariff Regulation 2006. As per Regulation 4.3 of the Distribution Tariff Regulations 2006, the methodology for computation of normative O&M expense was as follows:

Quote

4.3 Operation & Maintenance Expenses (O&M):

1. The O&M expenses comprise of employee cost, repairs & maintenance (R&M) cost and administrative & general (A&G) cost. The O&M expenses for the base year shall be calculated on the basis of historical / audited costs and past trend during the preceding five years.

However, any abnormal variation during the preceding five years shall be excluded. For determination of the O&M expenses of the year under consideration, the O & M expenses of the base year shall be escalated at inflation rates notified by the Central Government for different years. The inflation rate for above purpose shall be the weighted average of Wholesale Price Index and Consumer Price Index in the ratio of 60:40. Base year, for these regulations means, the first year of tariff determination under these regulations.

2. Where such data for the preceding five years is not available the Commission may fix O&M expenses for the base year as certain percentage of the capital cost.

3. Incremental O&M expenses for the ensuing financial year shall be 2.5% of capital addition during the current year. O&M charges for the ensuing financial year shall be sum of incremental O&M expenses so worked out and O&M charges of current year escalated on the basis of predetermined indices as indicated in regulation 4.3 (1).

4. The O&M expenses shall be brought to an efficient level i.e. in equivalence with similarly placed efficient utilities. The Commission may fix norms based on the circuit kilometers of distribution lines and number of bays in substation and such other parameters, as may be determined by the Commission in due course of time.

5. The Commission may consider additional O&M expenses on account of war, insurgency, and change in laws or like eventualities for a specified period.

Unquote

5.6.5 The Petitioner further submitted that the Commission as per the MYT Regulations 2006, the O&M Expenses were computed in consolidated manner without bifurcating the same into the A&G, R&M and Employee cost. Accordingly, the Commission approved the O&M expense for FY 2015-16 and FY 2016-17 in consolidated manner.

5.6.6 For the purpose of computation of normative R&M Expenses, A&G Expenses and Employee expenses for the MYT Period FY 2020-21 to FY 2024-25, the Commission bifurcated the consolidated O&M expenses for FY 2015-16 & FY 2016-17 in proportion to Trued-up R&M Expenses, A&G Expenses and Employee expenses for FY 2017-18.

5.6.7 The Petitioner further submitted that the Commission, vide Tariff Order dated November 30, 2017, Trued up the O&M Expenses of Rs.45.20 Crore for FY 2015-16 which was net of Employee Cost Capitalization of Rs.6.90 Crores. Accordingly, the Gross O&M Expenses Trued-up for FY 2015-16 was Rs.52.10 Crore.

5.6.8 The Petitioner also submitted that the Commission, vide Tariff Order dated January 22, 2019 Trued up the O&M Expenses of Rs.51.44 Crore for FY 2016-17 which was net of Employee Cost Capitalization of Rs. 12.32 Crore. Accordingly, the Gross O&M Expenses Trued-up for FY 2016-17 was Rs. 63.76 Crore.

5.6.9 The Petitioner also submitted that the Commission vide its Tariff Order dated September 03,2019 trued up the O&M Expenses of Rs. 66.36 Crore which was net of Employee Cost Capitalization of Rs. 10.34 Crore, accordingly the Gross O&M Expenses trued-up for FY 2017-18 was Rs. 76.70 Crore The same gross Employee Cost was considered by the Commission for FY 2017-18 for computation of normative Employee Cost. Further, gross Employee Cost was also considered by the Commission for FY 2018-19 and FY 2019-20.

5.6.10 The Petitioner submitted that the while calculating the proportionate components of A&G Exp., R&M Exp. and Employee Exp. for FY 2015-16 and 2016-17, the Commission, erroneously considered net Trued-up O&M expense of Rs.45.20 Crore and Rs.51.44 Crore in FY 2015-16 and FY 2016-17 respectively (after deduction of Employee Cost Capitalized) instead of gross trued-up O&M Expenses of Rs.52.10

Crore (FY 2015-16) and Rs.63.76 Crore (FY 2016-17). Details of computation done by the Commission is given in table below:

TABLE 5-31: COMPUTATION OF O&M EXPENSES AS PER TARIFF ORDER DATED AUGUST 26, 2021 (Rs. Crore)

Particulars	FY 16	FY 17	FY 18	FY 19	FY 20	Avg FY 18	Indices for FY 19 (%)	FY 19	Indices for FY 20 (%)	FY 20	Indices for FY 21 (%)	FY 21	Indices for FY 21 (%)	FY 22
Emp Exp.	15.5	17.7	26.4	29.6	35.9	25.03	5.2	26.3	6.3	28.0	5.35	29.5	6.00	31.25
R&M Exp.	22.9	26	38.8	39.9	38.6	33.22	5.2	35	6.3	37.2	2.96	38.3	2.37	39.16
A&G Exp.	6.8	7.74	11.5	12.3	13.4	10.37	5.2	10.9	6.3	11.6	2.96	10.8	2.37	12.22
O&M Excl. Fin. Chg.	**45.2**	**51.4**	**76.7**	**81.8**	**87.9**	**68.62**		**72.2**		**76.7**		**78.6**		**82.63**
Fin. Chg.	3.07	1.71	1.64	1.58	1.74	1.95	5.2	2.05	6.3	2.18	2.96	2.24	2.37	2.29
Gross O&M	**48.3**	**53.2**	**78.3**	**83.4**	**89.7**	**70.57**		**74.2**		**78.9**		**80.8**		**84.93**

5.6.11 The Petitioner submitted that the Commission appreciate that the Employee Expenses capitalized by the Company is necessarily required to be deducted from the Gross Employee Expenses to arrive at the Net Employee Expenses after determination of normative employee expense, **therefore, Gross Employee Expenses need to be considered while computing the normative Employee Expenses.**

5.6.12 The Petitioner further submitted that the Regulation 45 of MYT Regulations, 2019 provides that the O&M expenses shall be derived on the basis of the average of the Trued-Up values (without efficiency gain / loss) for the last five (5) financial years ending March 31, 2019 subject to prudence check by the Commission. In this regard, the Commission had in addition to the normative O&M expenses determined in accordance with as Distribution Tariff Regulations, 2006 and MYT Regulations, 2014 allowed additional O&M expenses incurred by the Petitioner which were not included in Normative O&M expenses as enumerated below –

- Expenses incurred for compliance of directives of the Commission;
- Impact of Service Tax till FY 2016-17; and
- Impact of Goods & Service Tax (GST) in FY 2017-18.

- Cost of Borrowing of DPS

5.6.13 The details of the expenses approved by the Commission are given below:

- The Commission, while Truing up ARR for FY 2015-16 vide the MYT Tariff Order dated November 30, 2017, approved the Expenses incurred for compliance of directives of the Commission of Rs.0.82 Crore and Impact of Service Tax of Rs. 1.41 Crore separately in addition to the normative O&M Expenses. It also trued-up Cost of Borrowing for DPS of Rs.1.44 Crore for FY 2015-16 in MYT Tariff Order dated November 30, 2017.
- The Commission while Truing up the ARR for FY 2016-17 vide the Tariff Order dated January 22, 2019 approved the Expenses incurred for compliance of directives of Rs.1.12 Crore and Impact of Service Tax of Rs.2.05 Crore separately in addition to the normative O&M Expenses. The Commission also trued-up Cost of Borrowing for DPS of Rs.3.02 Crore for FY 2016-17 in Tariff Order dated January 22, 2019.
- The Commission, while Truing up the ARR for FY 2017-18 vide Tariff Order dated September 03, 2019, approved the Impact of Goods & Service Tax of Rs.2.22 Crore separately in addition to the O&M Expenses. The Commission also trued-up Cost of Borrowing for DPS of Rs.3.33 Crore for FY 2017-18 in the Tariff Order dated September 03, 2019.

5.6.14 The Petitioner submitted that the Commission has approved the above-referred legitimate expenses incurred by it in compliance to change in law / direction of the Commission, the same need to be considered as part of the Trued-up O&M Expenses for determination of Normative O&M Expenses for Base Year as per Regulation 45. However, the Commission while approving the O&M Expenses for FY 2021-22 vide it Tariff Order dated August 26, 2021 inadvertently not considered the above-mentioned additional O&M expenses being trued-up and approved in preceding years.

5.6.15 The Petitioner submitted that the in view of the provisions of MYT Regulations 2019, the above additional O&M expenses on Compliance of directives of the State

Commission, Impact of Service Tax and Impact of GST are required to be considered in determination of normative O&M Expenses for Base Year, accordingly, it has included the same in the computation of Average O&M Expenses for Base Year.

5.6.16 The Petitioner submitted that while truing up the ARR for FY 2018-19 and FY 2019-20, the Commission has not allowed the cost of borrowing for DPS vide the Tariff Orders dated December 04,2020 and August 26, 2021. Aggrieved by this, it has challenged the same by way of the Appeal No.98 of 2021 and the Appeal No.343 of 2021 (since remanded back vide judgement dated November 24,2022) respectively. Therefore, for the purpose of computation of Normative O&M Expenses, it has considered cost of borrowing for DPS for FY 2018-19 and FY 2019-20 on the basis of claims in respective true-up petition pending outcome of the above appeals.

5.6.17 The Petitioner further submitted that, truing up the ARR for FY 2018-19 and FY 2019-20, the Commission has not allowed the Impact of GST vide the Tariff Orders dated December 04,2020 and August 26, 2021. Aggrieved by this, it has challenged the same by way of the Appeal No.98 of 2021 and the Appeal No.343 of 2021 (since remanded back vide judgement dated 24.11.2022) respectively. Therefore, for the purpose of computation of normative O & M Expenses, the Company has considered the impact of GST and cost of borrowing of DPS for FY 2018-19 and FY 2019-20 on the basis of its claims in respective true-up petition pending outcome of the above appeals.

5.6.18 The Petitioner requested to approve the O&M Expenses after considering gross Employee Cost and expenses approved by the Commission towards (i) Expenses incurred for compliance of directives of the Commission; (ii) Impact of Service Tax; (iii) Impact of Goods & Service Tax; and (iv) Cost of Borrowing of DPS for FY 2020-21 and FY 2021-22.

5.6.19 The Petitioner further submitted based on above discussion and methodology as provided in Regulation 45 (a) to (e) of MYT Regulations 2019, the average of corrected trued up values of O&M Expenses including additional O&M expenses, as enumerated above, during last five (5) financial years i.e. FY 2015-16 to FY 2019-

20 for determining values of employee costs, A&G Expenses and R&M Expenses for the middle year i.e. FY 2017-18 is provided in below Table-:

TABLE 5-32: NORMATIVE O&M EXPENSES (Rs. Crore)

Sl. No	Particulars	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	Average Normative (FY 17-18)
1	Emp. Exp.	18.20	22.31	26.38	29.62	35.92	**26.49**
2	R&M Exp.	26.76	32.80	38.78	43.29	48.22	**37.97**
3	A&G Exp.	7.97	9.76	11.54	12.32	13.43	**11.00**
4	**Subtotal**	**52.92**	**64.88**	**76.70**	**85.23**	**97.57**	**75.46**
5	Finance Charges	3.07	1.71	1.64	1.58	1.74	**1.95**
6	S. Tax / GST	1.41	2.05	2.22	3.56	4.01	**2.65**
7	Fin. Cost of DPS	1.44	3.02	3.33	3.28	2.85	**2.78**
8	**Subtotal**	**5.92**	**6.78**	**7.19**	**8.42**	**8.61**	**7.38**
9	**Total O&M Expenses**	**58.84**	**71.66**	**83.89**	**93.65**	**106.18**	**82.84**

5.6.20 The Petitioner submitted that in line with the norms mentioned in Regulation 45 (c), the values of each component of O&M expenses arrived of the middle year (i.e., FY 2017-18) values is further escalated to determine the normative expenses till base year i.e., FY 2019-20 as shown in below table: -

TABLE 5-33: COMPUTATION OF NORMATIVE O&M EXPENSES FOR BASE YEAR (Rs. Crore)

Sl. No	Particulars	Ref.	Emp. Exp.	A&G Exp.	R & M Exp.	O&M Exp.
1	**Normative Expense (FY 17-18)**	**a**	**26.49**	**18.39**	**37.97**	**82.84**
2	Escalation Factor (FY 18-19)	b	5.20%	5.20%	5.20%	
3	**Normative Expense (FY 18-19)**	**c=a x (1 + b)**	**27.86**	**19.35**	**39.95**	**87.15**
4	Escalation Factor (FY 19-20)	d	6.30%	6.30%	6.30%	
5	**Normative Expense (FY 19-20)**	**e=c x (1 + d)**	**29.62**	**20.56**	**42.46**	**92.64**

5.6.21 The Petitioner based on the above determined normative O&M Expenses for Base Year i.e. FY 2019-20, the computation of normative O&M Expenses for FY 2022-23 is provided herein below.

Normative Employee Expenses

5.6.22 Regulation 45.1 of the MYT Regulations, 2019 provides for determination of normative employee expenses, as reproduced below:

Quote

Employee cost shall be computed as per the following formula escalated by consumer price index (CPI), adjusted by the provisions for expenses beyond the control of the licensee and one-time expected expenses, such as recovery/adjustment of terminal benefits, implications of pay commission, arrears, Interim Relief, etc.:

EMPN = EMPN-1 X (1+CPI inflation)

Where:

***EMPN**: Employee expense for the nth year;*

***EMPN-1:** Employee expense for the (n-1)th year;*

CPI inflation is the average of the Consumer price Index (CPI) for Immediately preceding three financial years

Unquote

5.6.23 The Petitioner based on above Regulation, the normative employee expenses for FY 2022-23 works out as shown in following Table below: -

TABLE 5-34: EMPLOYEE EXPENSES FOR FY 2022-23 (Rs. Crore)

Particulars	Emp. Exp. for Base Year (FY 2019-20)	CPI Inflation for FY 2020-21	Emp. Exp. for FY 2020-21	CPI Inflation for FY 2021-22	Emp. Exp. for FY 2021-22	Emp. Exp. for FY 2022-23
	a	b	c=a x (1+b)	d	e=c x (1+d)	f=e x (1+d)
Normative Emp. Expense	29.62	5.35%	31.20	5.89%	33.04	34.99

Administrative & General Expenses

5.6.24 Regulation 45.3 of MYT Regulations, 2019 provides the methodology for determination of normative A&G expenses, as shown below:

Quote

A&G expense shall be computed as per the following formula escalated by the Wholesale Price Index (WPI) and adjusted by provisions for confirmed initiatives (IT, *etc., initiatives as proposed by the Transmission Licensee and validated by the Commission) or other expected one-time expenses:*

A&Gn= A&Gn-1 (1+ WPI inflation)

Where:

A&Gn: A&G expense for the nth year;

A&Gn-1: A&G expense for the (n-1)th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years: …..

Unquote

5.6.25 The Petitioner considering the norms as mentioned above, the normative A&G expenses for FY 2022-23 works out as shown in below Table: -

TABLE 5-35: A&G EXPENSES FOR FY 2022-23 (Rs. Crore)

Particulars	A&G Exp. for Base Year (FY 2019-20)	WPI Inflation for FY 2020-21	A&G Exp. for FY 2020-21	WPI Inflation for FY 2021-22	A&G Exp. for FY 2021-22	A&G Exp. for FY 2022-23
	a	b	c=a x (1+b)	D	e=c x (1+d)	f=e x (1+d)
Normative A&G Expense	20.56	2.96%	21.17	5.32%	22.30	23.49

5.6.26 The Petitioner further requested in the Paragraph-2 above on "Revenue from Sale of Electricity", that if the Commission decides to include the Captive Consumption both Revenue (Rs.) and Sales (MU) as part of sales, then corresponding expenses in the A&G should also be allowed as the base A&G expenses does not include expenses on account of Captive Consumption due to the reason that the Commission has first time decided to include the same in Revenue of FY 2020-21.

Repair and Maintenance Expense

5.6.27 Regulation 45.2 provides the methodology for determining normative Repair and Maintenance expenses as in below Table: -

Quote

Repair and Maintenance expense shall be calculated as per the following formula:

R&M=n= R&Mn-1 (1+ WPI inflation)

Where:

R&Mn: Repairs & Maintenance expense for nth year;

R&Mn-1: Repairs & Maintenance expense for the (n-1)th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years.

Unquote

5.6.28 The Petitioner submitted considering the norms as mentioned above, the normative R&M expenses for FY 2022-23 works out as shown in Table below: -

TABLE 5-36: R&M EXPENSES FOR FY 2022-23 (Rs. Crore)

Particulars	R&M Exp. for Base Year (FY 2019-20)	WPI Inflation for FY 2020-21	R&M Exp. for FY 2020-21	WPI Inflation for FY 2021-22	R&M Exp. for FY 2021-22	R&M Exp. for FY 2022-23
	a	b	c=a x (1+b)	D	e=c x (1+d)	f=e x (1+d)
Normative R&M Expense	42.46	2.96%	43.72	5.32%	46.04	48.49

5.6.29 Regulation 45.2 provides the methodology for determining normative Repair and Maintenance expenses as shown below: -

Quote

Repair and Maintenance expense shall be calculated as per the following formula:

R&M=n= R&Mn-1 (1+ WPI inflation)

Where:

R&Mn: Repairs & Maintenance expense for nth year;

R&Mn-1: Repairs & Maintenance expense for the (n-1)th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years.

Unquote

5.6.30 The Petitioner submitted the summary of normative O&M Expenses as computed on the basis of methodology provided in Regulation 45 of MYT Regulations, 2019 as compared to preceding years is provided in below Table :-

TABLE 5-37: SUMMARY OF O&M EXPENSES (Rs. Crore)

Sl. No.	Financial Year	Nature	Employee Expenses	A&G Expense	R&M Expense	Gross O&M Expense
As per Distribution Tariff Regulations, 2006 and MYT Regulation, 2014						
1	FY 2015-16	Trued-up	18.2	13.89	26.76	**58.84**
2	FY 2016-17	Trued-up	22.31	16.55	32.8	**71.66**
3	FY 2017-18	Trued-up	26.38	18.73	38.78	**83.89**
4	FY 2018-19	Claimed Normative	29.62	20.74	43.29	**93.65**
5	FY 2019-20	Claimed Normative	35.92	22.04	48.22	**106.18**
As per MYT Regulations, 2019						
6	FY 2017-18	Normative	26.49	18.39	37.97	**82.84**
7	FY 2018-19	Normative	27.86	19.35	39.95	**87.15**
8	FY 2019-20	Normative	29.62	20.56	42.46	**92.64**
9	FY 2020-21	Normative	31.20	21.17	43.72	**96.09**
10	FY 2021-22	Normative	33.04	22.30	46.04	**101.39**
11	FY 2022-23	Normative	34.99	23.48	48.49	**106.97**

5.6.31 The Petitioner submitted that the normative O&M expenses as per MYT Regulations, 2014 for FY 2019-20 was Rs. 106.18 Crore whereas normative O&M expenses as per MYT Regulations, 2019 for the same FY 2019-20 is Rs. 92.64 Crore, this gap will increase in subsequent years, therefore O&M Expenses as determined on the basis of norms provided in Regulation 45 of MYT Regulations, 2019 is highly insufficient, skewed as compared to MYT Regulations, 2014.

5.6.32 The Petitioner further submitted that the Commission has been pioneering in implementation of various new regulations in the State of Uttar Pradesh. Further, the Ministry of Power has also issued several rules and regulations which are to be followed by it. The details of some of the Regulations are as follows:

1. **Uttar Pradesh Electricity Regulatory Commission (Standard of Performance) Regulations, 2019:** The Commission vide notification no. UPERC/Secy/Regulations/656 issued the UPERC (Standard of Performance) Regulations, 2019 ["SOP Regulations, 2019"] which is applicable on all the distribution licensees, their franchisee and the consumers in the State of Uttar Pradesh. The Commission in these regulations have made the Performance parameters more stringent and has considerably reduced time lines to resolve Consumer Complaints.

2. **Electricity (Rights of Consumers) Rules, 2020:** The Ministry of Power has introduced the Electricity (Rights of Consumers) Rules, 2020. These rules have made the Performance parameters more stringent and time lines to resolve Consumer Complaints have been reduced considerably.

3. **Directions of Ministry of Power (CEA) (Installation and Operation of Meters) (Amendment) Regulations, 2019:** Ministry of Power published the guidelines vide Notification Dated August 17, 2021, in pursuance to the provisions made in clause 4(1) (b) of the Central Electricity Authority (Installation and Operation of Meters) (Amendment) Regulations, 2019 in regard to timelines for the replacement of existing meters with smart meters with prepayment feature. The Relevant para is reproduced below:

   Quote

   ………………..

   2. All feeders and distribution transformers (DTs) shall be provided with meters having AMR facility or covered under AMI, as per the timelines specified below:

   (i) All feeders shall be metered by December, 2022.

   (ii) All DTs in electrical divisions having more than 50% consumers in urban areas with AT&C losses more than 15% in financial year 2019-20, and in all other electrical divisions with AT&C losses more than 25% in financial year 2019-20, shall be metered by December, 2023.

(iii) All DTs in areas other than those mentioned in (ii) above, shall be metered by March, 2025.

(iv) DTs and HVDS transformers having capacity less than 25 kVA may be excluded from the above timelines. …………………

Unquote

4. **Directions of Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021:** Bureau of Energy Efficiency vide notification no. 18/1/bee/discom/2021 dated October 06, 2021 has made the "The Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021". The said Regulations has defined the times lines for Feeder & DT Metering, Energy Accounting and Process of Energy Audit. The following are the key direction and timelines mentioned in the above-mentioned Regulations;

a) Every electricity distribution company shall conduct an annual energy audit for every financial year and submit the annual energy audit report to the Bureau and respective State Designated Agency and also made available on the website of the electricity distribution company within a period of four months from the expiry of the relevant financial year

b) Every electricity distribution company shall ensure that all feeder wise, circle wise and division wise periodic energy accounting shall be conducted by the energy manager of the electricity distribution company for each quarter of the financial year and submit the periodic energy accounting report to the Bureau and respective State Designated Agency and also made available on the website of electricity distribution company within forty-five days from the date of the periodic energy accounting.

c) The electricity distribution company shall establish an information technology enabled system to create energy accounting reports without any manual interference.

d) The electricity distribution company shall create a centralized energy accounting and audit cell comprising of:

   i. Every electricity distribution company shall designate a nodal officer, who shall be a full-time employee of the electricity distribution company in the rank of the Chief Engineer or above, for the purpose of reporting of the annual energy audit and periodic energy accounting and communicate the same to the Bureau.

   ii. a nodal officer, an energy manager and an information technology manager, having professional experience of not less than five years;

   iii. a financial manager having professional experience of not less than five years.

e) The energy accounting and audit system and software shall be developed to create monthly, quarterly and yearly energy accounting reports.

f) Every electricity distribution company shall provide the details of the information technology system in place as specified in clause (f) of regulation 5 that ensures minimal manual intervention in creating the energy accounting reports and any manual intervention of any nature, in respect of the period specified therein, shall be clearly indicated in the periodic energy accounting report.

5. **Directions of Commission for 100% Feeder Metering:** The Commission vide its Tariff Order dated December 04, 2020 and dated August 26, 2021 also directed the Company to ensure 100% feeder metering and DT metering with energy audit within next one year.

6. Cyber Security related Regulations and Directions:

   a) In view of the ever-rising risks associated with cyber security for both IT (Information Technology) and OT (Operational Technology) Infrastructure, the Ministry of Power and various other government bodies have issued a series of Regulations and Directions to the Power Utilities including the Company. To comply with the aforesaid regulations and directions, the Company has to share cyber security related information/details to the respective agencies and more importantly need to upgrade its capabilities to counter the cyber security-related threats simultaneously. In this regard, following are the details of the recent Regulations / directions issued by various authorities:

i) **Central Electricity Authority (CEA)**

- CEA, vide CEA-CH-13-12/4/2021-IT Division dated 8th Oct 2021, has issued "Guidelines on Cyber Security for Power Sector" to be complied by all Power Sector entities mandatorily;
- CEA has also directed all Power Sector entities to create, maintain and regularly practice (through mock drills) their "Cyber Crisis Management Plan (CCMP)". Compliance with the Cyber Crisis Management Plan requires multiple new initiatives to be implemented in the area of cyber security, such as implementation of Security Incident and Event Management software, Firewall for screening of network traffic between IT and OT networks, tool to scan traffic in OT networks, etc.
- All Power utilities also have to identify and report their "Critical Information Infrastructure (CII)" to CEA and NCIIPC to identify Nationwide CIIs in Power Sector.

ii) Computer Security Incident Response Team Power (CSIRT)

- Central Electrical Authority vide letter no. CEA.CH-13-12/11/2021-IT-Div./348 dated 06.10.2021 has formed CSIRT to work as single Nodal Agency for Cyber Security for entire power sector to deal with all emergencies of Cyber security in entire power sector.

b) To comply with the Regulations and Directions issued by various agencies mentioned above and specially to comply with the mandatory requirements of "Guidelines on Cyber Security for Power Sector" issued by the CEA, the Company need to take following steps:

- Continuous Monitoring (24 X 7) for Cyber Security related events and incidents occurring in IT and OT infrastructure and assets
- Regular monitoring and maintenance of Data Centre and related assets
- Timely reporting to all agencies for various requirements of compliance
- Procurement and maintenance of hardware, software and tools required for Cyber Security
- Maintain adequate number of skilled manpower to manage all compliances and also regularly upgrade skill sets for the involved manpower to meet latest International Cyber trends and challenges
- Carry out regular training and awareness session for the entire employee base and external parties on Cyber Security related matters.
- Engage external auditors and consultants time to time to check if Company's Cyber Security Posture is up to the required standards and what other measures can be taken to improve the same.

c) The Petitioner submitted that it requires to create infrastructure for compliance of the above Regulations and Directions. For the aforesaid purpose, The it need to procure and install additional infrastructure (including servers, Firewall, communication bandwidth, network devices, Data Centre devices, etc) and cyber security related software and tools like Antivirus, Security Information and Event Management (SIEM), OT Visibility Tool, Security Operation Centre (SOC), Endpoint Detection and Response (EDR), Mobile Device Management (MDM), etc to facilitate compliance of the Directions of the above mentioned Governing Bodies.

d) To comply with the requirement of "Guidelines on Cyber Security for Power Sector" issued by the CEA, the Company also needs to appoint and maintain an in-house Information Security Team with adequate manpower and with members like Chief Information Security Officer (CISO), Deputy/Alternate CISO and other necessary resources to manage cyber security for the organization and monitor various tools and software, etc. which will also add to the O&M on regular basis to comply with the need to continuously upgrade the skills of the employees responsible for managing cyber security.

e) Thus, in order to comply with the above-mentioned Regulations and Guidelines, it required to purchase new hardware, software and tools and also required to recruit additional competent manpower leading to additional expenses O&M Expenses.

5.6.33 The Petitioner submitted that it will require to create infrastructure for compliance of the above regulations therefore DT and Feeder metering project is being proposed to facilitate compliance of the Directions of the Commission, Ministry of Power and Bureau of Energy Efficiency. The overall project comprises of installation and commissioning Energy Meters, LTCTs, Meter Boxes, associated communication devices along with HES application, Software Applications, IT Hardware, Data exchange and integration to fulfil the reporting requirements.

5.6.34 The Petitioner further submitted that the above-referred installation and commissioning of DT meters, Feeders and HES and Software will also entail annual maintenance cost thereof. It also need to appoint Energy Manager, Financial Manager, IT Manager, Third Party Certified Accredited Energy Auditor etc. which will also have additional employee cost and consequently it will have to incur additional administrative cost on regular basis.

5.6.35 The Petitioner also submitted that in order to comply with the above new / amended Regulations, it required to recruit additional competent manpower leading to additional expenses on employee cost, A&G expenses and R&M Expenses. Therefore, such additional O&M expenses required to be incurred to comply with the above Regulations promulgated subsequent to the MYT Regulations 2019, need to be allowed as additional O&M expenses over and above the normative O&M expenses determined under MYT Regulations 2019.

5.6.36 The Petitioner also submitted that expenses incurred for compliance of above rules and regulation are constitute “Change in Law” event as defined in Regulation 2(9) of MYT Regulations, 2019 as reproduced below:

Quote

2 (9) "Change in Law" means occurrence of any of the following events:

a) enactment, bringing into effect or promulgation of any new Indian law; or

b) adoption, amendment, modification, repeal or re-enactment of any existing Indian law;

or c) change in interpretation or application of any Indian law by a competent court, Tribunal or Indian Governmental Instrumentality, which is the final authority under law for such interpretation or application; or d) change by any competent statutory authority in condition or covenant of any consent or clearances or approval or Licence available or obtained for the Project; or e) coming into force or change in any bilateral or multilateral agreement or treaty between the Government of India and any other Sovereign Government having implications for the Transmission System regulated under these Regulations;

Unquote

5.6.37 The Petitioner submitted as per regulations 25 (e) & (g) of the MYT Regulations, 2014, the same are being reproduced below –

Quote

25. Operation & Maintenance Expenses

…………………..

(e) The One-time expenses and the expenses beyond the control of the Distribution Licensee shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check.

…………………..

Unquote

5.6.38 The Petitioner submitted that the Commission vide its Tariff Order dated August 26, 2021 and Tariff Order dated July 20, 2022 for the U.P. State DISCOMs has also allowed additional R&M expenses equivalent to 50% of Normative R&M expenses to comply with SOP regulations in addition to the Normative O&M expense. The extract of relevant para of the Tariff Order dated August 26, 2021 and dated July 20, 2022 of the U.P. State DISCOMs is reproduced below:

"Further, the Commission has directed the Licensees to strictly comply with the SoP regulations. Hence, for the first year of implementation, they would need additional support over and above the norms, to carry out the work and comply with the SoP Regulations and better consumer satisfaction. Hence, 50% of R&M expenses allowed for the year (as per norms) has been provided as additional one-time R&M expenses for proper execution of work in these difficult Covid time and to provide better services to the consumers also. The same shall be reviewed at the time of True-Up wrt to the actuals to the satisfaction of the Commission".

[Tariff Order dated 26.08.2021 for UP State Discoms]

" 6.7.47. Further, in addition to the above, the Commission has approved new Regulations, which provides the framework for development of CGRF across the State in line with the provisions in the Electricity (Right of Consumers) Rules, 2020 notified dated December 31, 2020. The Regulation will be published in official Gazette shortly. As per this the constitution of CGRFs will be different from the existing framework which will result in increase in the number of CGRFs etc. As a result, the Petitioners will have to incur additional cost for successful implementation of these Regulations. Therefore, the Commission, provisionally allows 50% of R&M as additional O&M expenses for FY 2022-23 for constitution of CGRFs along with the implementation of SoP Regulations. The same shall be reviewed at the time of True-Up with respect to the actuals to the satisfaction of the Commission. The Petitioners are required to submit the expenses incurred under the above provisional additional O&M expenses allowed along with the True Up of FY 2022-23."

[Tariff Order dated 20.07.2022 for UP State Discoms]

5.6.39 The Petitioner submitted that it has considered the impact of such additional O&M expenses @ 50% of the R&M Expenditure for the purpose of compliance of the New/amended Regulations and Directions as described above and requested Commission to approve additional expenses equivalent to 50% of the normative R&M Expenses over and above the Normative O&M Expenses as being allowed to UPPCL's Discoms.

5.6.40 The Petitioner also submitted that the Commission vide Tariff Order dated July 20, 2022 has approved the O&M expenses at Rs. 88.49 Crore for FY 2022-23 against which it has estimated O&M Expenses for FY 2022-23 at Rs. 168.26 Crore (net of employee cost capitalised) which includes the additional expenditure incurred by the Company for compliance of above referred additional Regulatory / SOP compliances.

5.6.41 The Petitioner submitted the approved, normative and estimated O&M Expenses for FY 2022-23 in below table:

TABLE 5-38: O&M EXPENSES FOR FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Approved	Normative	Claimed in APR
1	Repair & Maintenance Expenses	41.31	48.49	64.72
2	Employees Expenses	33.08	34.99	76.90
3	Administrative & General Expenses	14.10	23.49	26.63
4	Additional R&M for SOP Compliance etc.	-	25.54	Included above
5	**Total O&M Expenses**	**88.49**	**132.51**	**168.26**

5.6.42 The Petitioner submitted that the above shown A&G Expenses of Rs. 26.63 Crore includes Finance Charges of Rs. 2.63 Crore in line with the Regulation 45 of MYT Regulation, 2019.

5.6.43 The Petitioner also submitted that the above table that the O&M Expenses as determined on the basis of norms provided in Regulation-45 of MYT Regulations, 2019 is highly insufficient, sked and is not reflective of the actual expenses in accordance with the business parameters as there is huge gap between the estimated O&M expenses and the amount approved by the Commission on normative basis in accordance with the Regulation 45 of MYT Regulations, 2019.

5.6.44 The Petitioner also submitted that the above referred A&G Expenses includes Finance Charges of Rs.2.63 Crore comprising expenses as detailed here-in-below:-

v) **Loan Processing Charges:** The Company has negotiated a number of facilities in preceding years and also estimated the requirement for ensuing year. During, FY 2021-22, the Company has incurred expenses aggregating to Rs. 0.17 Cr on renewal of the existing Working Capital Facilities including LC facilities for payment security of Power Purchase Agreements in accordance with their respective terms of agreement and issuance Commercial Paper to facilitate short-term funding of regulatory asset and working capital requirement.

vi) **Credit Rating Charges:** Credit rating of banking (Fund / Non-Fund based) facilities has become imperative under the Basel II Norms. As per these norms, unrated facilities will be financed at least 4.50% higher as per credit adequacy requirements in comparison with rated facilities. In order to comply with the above requirement of RBI and also to save additional 4.50% p.a. interest cost, the Company has been getting its credit rating from India Rating & Research (P) Limited.

vii) **Collection Facilitation Charges:** Continuing its efforts to provide maximum possible facilities to the consumers, the Company started various new initiatives for enabling consumers to make payment via Internet, Virtual Account, National Automated Clearing House, Bharat Bill Pay System, Bharat QR, UPI, NEFT / RTGS etc. The Commission has also, vide its order dated 29th May, 2015 directed the Company to provide more avenues to the consumers for payment of electricity dues through Online Mode and has also directed it to bear charges for such service upto an amount of Rs. 4,000/- per transaction. Provisions of these facilities require some expenditure which has been included in Collection Facilitation Charges. Apart from being cost of new initiative these charges are directly related to revenue and with increase in tariff and revenue and increasing preference for Digital Payment modes by consumers, there is an increase in these charges.

viii) **Other Finance Charges:** There are other bank charges as well like loan documentation charges, LC Issue Charges, banking charges and other miscellaneous charges etc. It is pertinent to mention here that the Ministry of Power vide its order no. 23/22//2019-R&R dated 28th June, 2019 mandated every Distribution Company to open a letter of credit for desired quantum of power in favour of the Generating Company. The relevant extract of the order is reproduced below for reference of the Hon'ble Commission.

" i. In accordance with Section 28 (3) (a) the NRLDC & RLDC shall despatch power only after it is intimated by the Generating Company and /Distribution Companies that a Letter of Credit for the desired quantum of power has been opened and copies made available to the concerned Generating Company."

5.6.45 The Petitioner submitted that since, the O & M expenses determined on normative basis in accordance with the Regulations-45 of MYT Regulations, 2019, are grossly insufficient as compared to likely expenses estimated by it and requested to consider O&M expenses for FY 2022-23 as estimated by it which are commensurate with its size of the business and also necessary to run operations efficiently owing to various factors which are beyond its control.

Capitalization of Employee Cost

5.6.46 The Petitioner has estimated to capitalized an amount of Rs. 11.00 Crore out of the total employee cost of Rs. 83.57 Crore estimated to be incurred during FY 2022-23, as per past practice duly approved by the Commission. In brief, for the purpose of capitalization of employee costs, the Petitioner at the time of execution of project, records actual man hours spent by each engineer/ executive into the system / SAP Software. These hours are then matched with the cost per hour of that employee by the software itself and actual employee cost so incurred, is capitalized along with the specific project and the entire process of its project/financial accounting is through SAP, and there is least manual intervention in computation of expenses to be capitalized. These man-hours and cost are duly verified by its Statutory Auditors of the in detail and is approved by the Board of Directors of the Petitioner subsequently.

5.6.47 The Petitioner requested the Commission to approve the capitalization of employee cost at Rs. 10.00 Crore during F Y 2022-23.

5.6.48 The Petitioner requested Commission to approve the net O&M expenses at Rs. 158.26 Crore for FY 2022-23 estimated by subject to truing up in future as provided in below table: -

TABLE 5-39: O&M EXPENSES FOR FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Approved	Normative	Estimated
1	Repair & Maintenance Expenses	41.31	48.49	64.72
2	Employees Expenses	33.08	34.99	76.90
3	Administrative & General Expenses	14.10	23.49	26.63
4	Additional R&M for SOP Compliance etc.	-	24.54	Included above
5	**Total O&M Expenses**	**88.49**	**132.51**	**168.26**
6	Employee Cost Capitalised	(14.00)	(10.00)	(10.00)
7	**Net O&M Expenses**	**74.49**	**122.51**	**158.26**

Commission's Analysis

5.6.49 Regulation 45 of MYT Regulations, 2019, stipulates the detailed methodology for determination of O&M expenses for the Control Period from FY 2020-21 to FY 2024-25 reproduced as under:

Quote

45 Operation and Maintenance Expenses

a) The Operation and Maintenance expenses for the Distribution Business shall be computed as stipulated in with these Regulations.

b) The Operation and Maintenance expenses shall be derived on the basis of the average of the Trued-Up values (without efficiency gain / loss) for the last five (5) financial years ending March 31, 2019 subject to prudence check by the Commission. However, if Trued-Up values (without efficiency gain / loss) are not available for FY 2018-19, then last five (5) available Trued-Up values (without *efficiency gain / loss) will be considered and subsequently when the same are available the base year value (i.e., FY 2019-20) will be recomputed*

c) The average of such operation and maintenance expenses shall be considered as Operation and Maintenance expenses for the middle year and shall be escalated year on year with the escalation factor considering CPI and WPI of respective years in the ratio of 60:40, for subsequent years up to FY 2019-20.

d)The One-time expenses such as expense due to change in accounting policy, arrears paid due to Pay Commissions, etc., and the expenses beyond the control of the Distribution Licensee such as dearness allowance, terminal benefits, etc., in Employee cost, shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check.

(e) At the time of Truing-up of the O&M expenses, the actual point to point inflation over Wholesale Price Index numbers as per Office of Economic Advisor of Government of India and the actual Consumer Price Index for Industrial Workers (all India) as per Labour Bureau, Government of India, in the concerned year shall be considered.

45.1 Employee Cost

Employee cost shall be computed as per the following formula escalated by consumer price index (CPI), adjusted by provisions for expenses beyond the control of the Licensee and one-time expected expenses, such as recovery / adjustment of terminal benefits, implications of Pay Commission, arrears, Interim Relief, etc.:

EMPn= EMPn-1 × (1+ CPI inflation)

Where:

EMPn: Employee expense for the nth year;

EMPn-1: Employee expense for the (n-1) th year;

CPI inflation is the average of Consumer Price Index (CPI) for immediately preceding three Financial Years.

45.2 Repairs and Maintenance Expense

Repairs and Maintenance expense shall be calculated by following formula:

R&Mn= R&Mn-1 (1+ WPI inflation)

Where:

R&Mn: Repairs & Maintenance expense for the nth year;

R&Mn-1: Repairs & Maintenance expense for the (n-1) th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years.

45.3 Administrative and General Expense

A&G expense shall be computed as per the following formula escalated by wholesale price index (WPI) and adjusted by provisions for confirmed initiatives (IT etc. initiatives as proposed by the Distribution Licensee and validated by the Commission) or other expected one-time expenses:

A&Gn= A&Gn-1 (1+ WPI inflation)

Where:

A&Gn: A&G expense for the nth year;

A&Gn-1: A&G expense for the (n-1) th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years:

Provided that Interest and Finance charges such as Credit Rating charges, collection facilitation charges, financing cost of Delayed Payment Surcharge and other finance charges shall be a part of A&G expenses.

Illustration: For FY 2020-21, (n-1) th year will be FY 2019-20 which is also the base year.

Unquote

5.6.50 The Commission vide deficiency letter dated January 06, 2023 sought basis for projection of Consumer Contribution/Deposit Works/Capital Subsidies/Grants etc. of Rs. 36.24 Crore for FY 2022-23. In reply the Petitioner submitted the following table:

TABLE 5-40: COMPUTATION OF CONSUMER CONTRIBUTION SUBMITTED BY THE PETITIONER

Consumer Category	Line Charges Per Connection			Estimated New Consumer	Estimated Consumer Contribution	Estimated New Consumer	Estimated Consumer Contribution
	Overhead	Underground	Average	FY 2022-23		FY 2023-24	
	Rs.	Rs.	Rs.	No.	Rs. Cr.	No.	Rs. Cr.
132 kV / 220 kV	**As per Actual**	**As per Actual**	**As per Actual**	-	-	1	1.65
33kV Large Consumer	**As per Actual**	**As per Actual**	**As per Actual**	2	10.00	4	20.00
33 kV	5,72,970	8,39,800	7,06,385	15	1.06	15	1.06
11 kV	2,27,480	2,72,020	2,49,750	150	3.75	170	4.25
LTCT with transformer	24,015	26,655	25,335	130	0.33	150	0.38
3 Phase LT (Urban/Industry/Commercial)	15,607	17,003	16,305	1,600	2.61	1,800	2.93
Single Phase LT (Urban/Commercial)	3,520	4,359	3,940	2,500	0.98	2,800	1.10
3 Phase LT (Village)	15,607	17,003	16,305	500	0.82	600	0.98
Single Phase LT (Village)	2,922		2,922	4,500	1.31	5,500	1.61
Single Phase Prepaid Meter	2,922		2,922	400	0.12	600	0.18
Three Phase Prepaid Meter	2,922		2,922	150	0.04	300	0.09
Conversion of Single point to Multipoint		12,475	12,475	4,000	4.99	4,000	4.99
New Societies Individual Connection		12,475	12,475	7,000	8.73	15,000	18.71
Meter & CT Replacement etc.					1.50		1.50
Total				**20,947**	**36.24**	**30,940**	**59.42**

5.6.51 The Commission vide letter dated January 06, 2023 sought confirmation that it has not claimed any Capital expenditure /additional capitalisation for FY 2022-23 for any 132/220 kV assets in the Petition. In reply the Petitioner confirm it has not incurred / claimed any Capital expenditure/additional capitalisation for FY 2022-23 for any 132/220 kV assets other than funded by consumer contribution.

5.6.52 The Commission vide Tariff Order dated July 20, 2022 had approved O&M expenses for FY 2022-23. The Commission has observed that the claimed net O&M expenses submitted by the Petitioner is higher than that approved by the Commission vide Tariff Order dated July 20, 2022. The Commission also observes that there is a significant difference between the same.

5.6.53 The Commission vide letter dated January 06, 2023 sought from the Petitioner break-up of the Capex claimed/approved for FY 2022-23 in the following parts in the MS-Excel format:

(i) Capex required for expansion / new connection / network growth;

(ii) Capex required for loss reduction;

(iii) Capex required for any other work with details.

5.6.54 In reply the Petitioner submitted the following table:

TABLE 5-41: DETAILS OF APPROVED AND ACTUAL CAPEX (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	
		Approved	Claimed in APR
1	Capex required for expansion/ new connection/network growth	157.22	163.17
2	Capex required for loss reduction		4.54
3	Capex required for any other work with details		21.35
	Total	**157.22**	**189.05**

5.6.55 With regard to the Petitioner's claim towards additional expenses for compliance of newly promulgated Regulations over and above the normative expenses as being allowed to UPPCL's Discoms also, the Commission is of the view that there is no comparison in the operations of the 5 State Discoms & the Petitioner. The State Discoms cover almost the full state & have a vast network with high losses & also a non-favorable consumer mix as compared to the Petitioner. Taking the same into consideration the Commission does not approve the claim of the Petitioner in regard to allowing the additional cost (O&M), as done for State Discoms in FY 2022-23.

5.6.56 With regard to Employee expenses, A&G expenses and R&M expenses, the Commission has provisionally computed normative value considering the normative employee expenses, A&G expenses and R&M expenses as computed for True-Up and inflation index as per the provisions of MYT Regulations, 2019. The normative employee expenses, A&G expenses and R&M expenses computed for FY 2022-23 will be considered as base value for FY 2023-24, detailed computation is shown in the subsequent Chapter.

5.6.57 Further, the analysis of actual O&M expenses for FY 2022-23 will be carried out at the time of True-Up proceedings based on actual data & annual audited accounts of the Petitioner.

5.7 CAPITAL EXPENDITURE

Petitioner's Submission

5.7.1 The Petitioner submitted considering various existing and upcoming Government

& Private projects in and around Greater Noida and based on the Demand Estimates for FY 2022-23, it has prepared its capital expenditure plan for FY 2022-23 at Rs. 189.05 Crore (excluding assets handed over by GNIDA & Other and without reducing Capital Contribution).

5.7.2 The Petitioner submitted that the Regulation 44.2 of the MYT Regulations, 2019 specifies as under:

Quote

44.2 The Capital Investment Plan shall be a least cost plan for undertaking investments. However, all capital expenditure projects of value exceeding Rs. Ten Crore and MUt have prior approval of the Commission on quarterly basis, and will be subject to prudence check.

Unquote

5.7.3 Accordingly, the item-wise details of the capital expenditure are given in the Table below: -

TABLE 5-42: CAPITAL EXPENDITURE FOR FY 2022-23 SUBMITTED BY THE PETITIONER (RS. CRORE)

Sl. No.	Nature of Works	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
I	New Connections, Replacement Stock & Metering	157.22	65.63
II	Substations, Transformers, 33kV, 11 kV & LT Network		70.30
III	Loss Control Activity		4.54
IV	Process System Automation		7.61
V	IT Projects		9.75
VI	Civil Works & Office Infrastructure Facility		6.73
VII	Tools & Testing Equipment		1.63
VIII	Vehicles		2.36
IX	Demand Side Management		1.00
X	Lease Hold Land		9.49
XI	**Sub-Total**	**157.22**	**179.05**
XII	Salary Capitalization	14.00	10.00
XIII	**Sub-Total**	**171.22**	**189.05**
XIV	Less: Consumer Contribution	44.49	36.24
XV	**Net Capital Expenditure**	**126.73**	**142.06**
XVI	Add: Assets taken over from GNIDA & Other Agencies	1.00	1.00
XVII	**Grand Total**	**127.73**	**143.06**

5.7.4 The Petitioner has submitted that the item-wise details of quantity and cost of the aforesaid capex.

5.7.5 The Petitioner submitted that the above capital expenditure is proposed to be incurred for the purpose of developing its Distribution Network and supporting facilities to meet its service obligation as defined in Code no. 4.1 and 4.2 of Uttar Pradesh Electricity Supply Code, 2005 and also to meet growth in demand for electricity from its existing and future consumers. The Petitioner mentioned that the above capital expenditure does not include any expenditure for the purpose of reduction of T&D Losses as the current losses are at the least economically and technologically.

5.7.6 The Petitioner has mentioned that that GNIDA, DMIC, UPSIDC, EPIP etc. are the local development authorities responsible for the development and upkeep of Greater Noida area. Every year the basic electric LT network developed by such agencies is handed over to the Petitioner for distribution of power to the consumers of Greater Noida and maintenance thereof without transferring the ownership of the same. Hence, for the purpose of accounting, upkeep and insurance, the Petitioner considers these assets at the value declared by such agencies which is accordingly considered for the purpose of determination of tariff. Since the ownership of these assets is not transferred to the Petitioner, they are not considered in addition to fixed assets. Hence, there is no impact on computation of ROE, interest on Term Loans and depreciation with respect to these assets. The value of actual asset handed over by GNIDA and Others has not been included above and will be submitted along with the true-up petition.

5.7.7 The Petitioner submitted that as per Regulation 20 of the MYT Regulations, 2019, the capital expenditure is required to be funded in the Debt-Equity ratio of 70:30. Accordingly, based on capex for FY 2022-23 as detailed above, the funding of the aforesaid capital expenditure of Rs. 142.06 Crore is given in the Table below: -

TABLE 5-43: CAPITAL EXPENDITURE FUNDING SUBMITTED BY THE PETITIONER (Rs. Crore)

Particulars	Ref.	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
Addition to GFA including Salary Capitalisation	a	171.22	189.05
Less: Assets Retired	b	(7.75)	(10.75)
Net Capex	**g=d+e-f**	**163.47**	**178.30**
Consumer Contribution	h	44.49	36.24
Capex to be financed	**i=g-h**	**118.98**	**142.06**
Debt - 70%	j=i x 70%	83.28	99.44
Equity- 30%	k=h x 30%	35.69	42.62

5.7.8 The Petitioner requested the Commission to approve the above Capital Expenditure plan.

Commission's Analysis

5.7.9 The Commission has observed that the Net Capital expenditure estimated by the Petitioner for FY 2022-23 is Rs. 189.05 Crore as against Rs. 171.22 Crore approved by the Commission in its Order dated July 20, 2022.

5.7.10 The closing CWIP of FY 2021-22 as approved in True-Up has been considered as opening CWIP for FY 2022-23. The Commission has provisionally considered the investment as submitted by the Petitioner. Moreover, considering the approach taken in the True-Up of this Order, the Commission has provisionally considered capitalization (asset addition during the year) for FY 2022-23 as submitted by the Petitioner after disallowing 25% of the same to arrive at the closing CWIP for the FY 2022-23. Closing CWIP computed for FY 2022-23 will be the opening CWIP for FY 2023-24, detailed computation of CWIP is shown in the subsequent Chapter.

5.7.11 Further analysis of Capital Investment for FY 2022-23 would be carried out during True-Up proceedings based on actual data and annual audited accounts of the Petitioner and as per the Regulation 44 of MYT Regulations, 2019.

5.8 INTEREST & FINANCE CHARGE

5.8.1 Interest and Finance Charges covers the following cost elements

- Interest on Long Term Loans
- Interest on Working Capital
- Interest on Security Deposits
- Finance Charges

5.9 INTEREST ON LONG TERM LOANS

Petitioner's Submission

5.9.1 The Petitioner submitted that, in accordance with Regulation 20.2 of the MYT Regulation, the Debt and Equity as at end of FY 2020-21 shall be considered as Opening Debt and Equity for FY 2021-22. However, as the Petitioner has filed appeals against Tariff Orders dated December 04, 2020 and August 26, 2021 before the Hon'ble APTEL, it has considered the Debt and Equity as per its True-Up Petition of FY 2021-22 for determination of Interest on Term Loan for FY 2022-23.

5.9.2 Accordingly, considering Capital Expenditures for FY 2018-19 to FY 2021-22 as claimed by the Petitioner and debt equity of 70:30, the opening normative net debt for FY 2022-23 works out to Rs. 535.65 Crore.

5.9.3 The Petitioner submitted that the repayment of Normative Term Loan has been considered as equivalent to depreciation being computed in accordance with Regulation 23 of the MYT Regulations, 2019.

5.9.4 The Petitioner stated that, Regulation 23.5 of MYT Regulations, 2019 provides as follows: -

Quote

> *23.5 The rate of interest shall be the weighted average rate of interest computed on the basis of the actual long- term loan portfolio at the beginning of each year:*
>
> *Provided that at the time of Truing- Up, the weighted average rate of interest of the actual long- term loan portfolio during the concerned year shall be considered as the rate of interest:*

Provided further that if there is no actual long- term loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest for actual loan shall be considered.

Unquote

5.9.5 The Petitioner submitted that since it does not have any actual Term Loan outstanding during FY 2022-23, therefore in accordance with above regulation, the last available weighted average rate of interest for the term loan has been considered for determination of normative interest on the term loan for FY 2022-23.

5.9.6 Accordingly, the total normative interest on Term Loan comes at Rs. 54.86 Crore for APR of FY 2022-23, is submitted for the approval of the Commission.

5.9.7 The summary of interest on Term Loan (normative) for FY 2022-23 is given in the Table below: -

TABLE 5-44: COMPUTATION OF INTEREST ON LONG TERM LOAN SUBMITTED BY THE PETITIONER (Rs. Crore)

Sl No	Loan Computation	Ref.	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
1	**Net Normative loan – Opening**	**a**	**424.13**	**535.65**
2	Increase/Decrease due to ACE during the Year	b	83.28	99.44
3	Repayments of Normative Loan during the year	c	47.42	63.85
4	**Net Normative loan – Closing**	**d=a+b-c**	**459.99**	**571.25**
5	Average Normative Loan*	e=(a+d)/2	442.06	553.45
6	Weighted average Rate of Interest on actual Loans	f	9.91%	9.91%
7	**Interest on Normative loan**	**g=e x f**	**43.82**	**54.86**

Commission's Analysis

5.9.8 The Commission has observed that the Petitioner has considered the weighted average interest rate as approved by the Commission in the Tariff Order for FY 2022-23 dated July 20, 2022.

5.9.9 The Commission has considered opening loan for FY 2022-23 equal to closing loan of FY 2021-22 as approved in the True-Up of FY 2021-22. Further, the Commission has considered loan additional for the year as 70% of net capitalisation considered for FY 2022-23. Closing value of loan for FY 2022-23 will be the opening loan for FY 2023-24, detailed computation is shown in subsequent Chapter.

5.9.10 Further, the detailed analysis of the Interest on Long Term Loans for FY 2022-23 would be carried out during True-Up proceedings based on actual data and annual audited accounts of the Petitioner.

5.10 INTEREST ON WORKING CAPITAL

Petitioner's Submission

5.10.1 The Regulation 25.2 of the MYT Regulations, 2019 specifies as under:

Quote

25.2 Distribution Business

(a) The working capital requirement of the Distribution Business shall cover:
(i) Operation and maintenance expenses for one month;

(ii) Maintenance spares at 40% of the R&M expenses for two months; and

(iii) One and half month equivalent of the expected revenue from charges for use of Distribution system at the prevailing Tariff (excluding Electricity Duty);

Minus

(iv) Amount held as security deposits from Distribution System Users:

Provided that for the purpose of Truing-Up for any year, the working capital requirement shall be re-computed on the basis of the values of components of working capital approved by the Commission in the Truing-Up.

Unquote

5.10.2 The Petitioner submitted that the as per the UP-Electricity Supply Code, 2005 (as per 13th amended), the power supply bill for a month (30/31 days) need to be raised within next 7 days with 15 days period (due date) for payment of the same. Thereafter, the Distribution Licensee MU wait for another 15 days period before disconnecting supply of power in case of non-payment (disconnection date). Thus, it would take almost 67 days for a Distribution Licensee to recover payment of its electricity bills, assuming all the consumers pay their bills in-time. However, the MYT Regulations, 2019 considers debtors equivalent to 45 days only while the in MYT Regulations, 2014, debtors equivalent to two months of the expected revenue were considered as a part of the working capital requirement. Therefore, the reduction of receivables from two months to one and half months is not justified and in fact is contrary to the provisions of Electricity Supply Code, 2005.

5.10.3 The Commission in its Tariff Order dated July 20, 2022 has also not considered the Electricity Duty as part of the Receivables thereby reducing amount of Working Capital leading to disallowance of interest on working capital based on Regulation 25.2 of the MYT Regulations, 2019.

5.10.4 The Petitioner submitted that the Electricity Duty is billed by the Petitioner to the consumers along with the other charges for electricity. Therefore, the same is integral part of the revenue and the receivables of the Petitioner. Accordingly, disallowance of working capital interest by not considering Electricity Duty as part of Receivables is against the commercial principles and the provisions of The Electricity (Duty) Act, 1952. Therefore, the Petitioner has considered Electricity Duty as part of Receivables for the purpose of determination of normative Interest on Working Capital.

5.10.5 Accordingly, the computation of interest on working capital for FY 2022-23 is shown the Table below: -

TABLE 5-45: INTEREST ON WORKING CAPITAL SUBMITTED BY THE PETITIONER FOR FY 2022-23 (Rs. Crore)

Particulars	Ref	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
O&M expenses for 1 month	A	6.21	13.36
One and a half month equivalent of expected revenue from distribution tariff	B	250.86	297.44
Maintenance spares @ 40% of the R&M Expense for 2 Months	C	2.75	5.93
Gross Total	**d=a+b+c**	**259.82**	**316.73**
Security Deposits from Consumers			

Particulars	Ref	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
Opening Balance	E	288.96	289.96
Received during the year (Net of Refunds)	F	10.64	32.60
Closing Balance	g=e+f	299.59	**322.56**
Average Security Deposit	**h=(e+g)/2**	**294.28**	**306.26**
Security Deposit with UPPCL	I	11.28	11.28
Net Security Deposits from Consumers	**j=h-i**	**283.00**	**294.98**
Net Working Capital	**k=d-j**	**-**	**21.75**
Rate of Interest for Working Capital (SBI - 1Year MCLR + 2.50%)	L	9.50%	10.20%
Interest on Total Working Capital	**m=k*l**	**-**	**2.22**

5.10.6 The Petitioner submitted that as per the practice followed by the Commission in its various Tariff Orders, latest being dated July 20, 2022, the security deposit of Rs. 11.28 Crore passed on to UPPCL till FY 2005-06 in accordance with past arrangement, has been deducted from the total Security Deposit available with the Petitioner while computing working capital requirement as the same are not available at the disposal of the Petitioner for meeting its working capital requirements.

5.10.7 The Petitioner submitted that the above table does not include the amount of Rs. 10.00 Crore paid to UPPCL based on the Orders of the Commission and Hon'ble Allahabad High Court in FY 2006-07 in the matter of providing 10 MVA additional power by UPPCL which is pending before the Hon'ble Supreme Court of India.

Commission's Analysis

5.10.8 The analysis of the Interest on Working Capital for FY 2022-23 would be carried out during True-Up proceedings based on actual data and annual audited accounts of the Petitioner.

5.11 INTEREST ON CONSUMER SECURITY DEPOSIT

Petitioner's Submission

5.11.1 The Petitioner submitted that Regulation 25.2 (c) of the MYT Regulations, 2019 provides that the licensee shall pay interest equivalent to the bank rate or more on the consumer security deposits, as may be specified by the Commission. The Commission vide its Tariff Order dated July 20, 2022 has approved the Interest on Security Deposit @ 4.25% p.a. Accordingly, based on the RBI's Bank Rate prevailing on the April 01, 2022 i.e., 4.25% p.a. as also approved by the Commission, the interest payable on security deposit from consumers during FY 2022-23 is given below: -

TABLE 5-46: INTEREST ON SECURITY DEPOSIT SUBMITTED BY THE PETITIONER FOR FY 2022-23 (Rs. Crore)

Particulars	Ref.	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
Opening Balance of Security Deposit	a	288.96	289.96
Addition During the year	b	10.64	32.60
Closing Balance for Security Deposit	c=a+b	299.59	322.56
Average Balance for Security Deposit	**d=(a+c)/2**	**294.28**	**306.26**
Rate of Interest	e	4.25%	4.25%
Interest payable on Security Deposit	**f = d x e**	**12.51**	**13.02**

Commission's Analysis

5.11.2 The Commission has observed that the Petitioner has considered the RBI's Bank Rate of 4.25% per annum, for computation of rate of interest payable on security deposit from consumers during FY 2022-23.

5.11.3 Further, the analysis of the interest on security deposit for FY 2022-23 would be carried out during True-Up proceedings based on annual audited balance sheet & P&L statements of the Petitioner.

5.12 TOTAL INTEREST COST

Petitioner's Submission

5.12.1 As discussed above, the details of total interest and finance charges estimated for FY 2022-23 is given in the Table below:

TABLE 5-47: TOTAL INTEREST AND FINANCE CHARGES SUBMITTED FOR FY 2022-23 (Rs. Crore)

Sl. No.	Description	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
1	Interest on Long term loans	43.81	54.86
2	Interest on working capital facilities	-	2.22
3	Interest on security deposit	12.51	13.02
4	**Total Interest & Fin. Charges**	**56.32**	**70.09**

Commission's Analysis

5.12.2 The Commission has observed that the total Interest and finance cost for FY 2022-23 are higher than that approved by the Commission vide Tariff Order dated July 20, 2022 for FY 2022-23. Further analysis would be carried out during True-Up of FY 2022-23 subject to prudence check by the Commission.

5.12.3 The analysis of finance charges if any for FY 2022-23 will be carried out as per Regulations 34, MYT Regulations, 2019 during True-Up proceedings after receipt of actual data and annual audited accounts of the Petitioner.

5.13 GROSS FIXED ASSETS (GFA) AND DEPRECIATION

Petitioner's Submission

5.13.1 The Petitioner submitted that the computation of GFA for FY 2022-23 is shown in the Table below: -

TABLE 5-48: GROSS FIXED ASSETS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (Rs. Crore)

Sl. No.	Description	Tariff Order for FY 2022-23 dt. 20.07.2022	Claimed in APR		
			GFA till 01.04.20	GFA added after 01.04.20	Closing GFA FY 2022-23
1	Opening Balance	1,580.14	1,666.70	299.36	1,966.05
2	Addition during the Year	171.22	-	189.05	189.05
3	Retirement during the Year	7.75	10.75	-	10.75
4	**Closing Balance**	**1,743.60**	**1655.95**	**488.41**	**2,144.36**
** Excluding assets taken over from GNIDA, UPSIDC & Otherwise*					

5.13.2 The Petitioner submitted that the above additions to the GFA does not include the assets handed over by other agencies GNID, UPSIDC, DIMC etc. for distribution of electricity to its consumers and maintenance thereof.

5.13.3 The Petitioner further submitted that, the Commission vide its Tariff Order dated December 04, 2020 has directed the Petitioner to maintain separate individual asset wise FAR for assets capitalised after April 01, 2020 so that the Gross Block and Depreciation may be computed separately from the Gross Block before April 01, 2020. In this regard the Petitioner maintains its Fixed Asset Register in renowned SAP–ERP system. The details of each individual fixed asset have been entered into the SAP-ERP and the applicable Depreciation Rate, Method & Extent as provided in MYT Regulations, 2014 and MYT Regulation, 2019 been defined as parameter in the SAP- ERP. Hence, the Depreciation is computed by the SAP-ERP system strictly as per the rates and method defined in MYT Regulations, 2019 upto the maximum limit of 90% except for small items having value upto Rs. 5,000/- which are depreciated @ 100%. The SAP-ERP generates the FAR comprising the Gross Block, Date of Acquisition, Rate of Depreciation, Addition to Gross Block, Assets Retired, Depreciation for the year, Accumulated Depreciation etc. The Petitioner submitted that it prepares its Audited Financial Statement on the basis of such system generated FAR only. The depreciation so arrived at, is being sample checked manually for accuracy. Thus, the Depreciation is computed by the SAP-ERP on the basis of defined parameters which meets the direction of the Commission for separate computation of Depreciation on Gross Block.

5.13.4 The summary of Depreciation as submitted by the Petitioner for FY 2022-23 is shown the table below:

TABLE 5-49: DEPRECIATION SUBMITTED BY THE PETITIONER FOR FY 2022-23 (Rs. Crore)

Sl. No.	Description	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
1	Depreciation on Gross Block till 01.04.2020	63.26	56.66
2	Depreciation on Gross Block after 01.04.2020		22.03
3	**Gross Depreciation for the Year**	**63.24**	**78.69**
4	Less: Depreciation on Consumer Contribution	15.82	14.84
5	**Net Depreciation**	**47.44**	**63.85**
6	Average GFA	1,661.87	2,055.21
7	Weighted Average Depreciation Rate	3.81%	3.83%

Commission's Analysis

5.13.5 The Commission vide deficiency letter dated January 06, 2023 sought the basis for projection of deletion in assets of Rs. 10.75 Crore for FY 2022-23. In reply the Petitioner submitted that the based on the actual amount of assets retired during previous years, it has estimated retirement value of assets of Rs. 10.75 Crore during FY 2022-23 subject to truing up as per Audited Annual Accounts.

5.13.6 The Commission observed that the Petitioner has claimed the additional Capitalisation as Rs. 189.05 Crore for FY 2022-23, whereas the depreciation sheet (Format F30) shows Rs. 183.69 Crore. The Commission vide deficiency letter dated January 06, 2023 sought reconciliation for the same. In reply the Petitioner stated that there has an inadvertent error in "Annexure-9 Depreciation as per UPERC Method" submitted alongwith Petition no. 1919 of 2022 dated November 30, 2022. The same has been corrected and resubmitted for consideration of the Commission as follow Table:

		Gross Fixed Assets				
S.No.	**Particulars**	**Opening GFA**	**Addition to GFA**	**Deduction to GFA**	**Deduction Grants**	**Closing GFA**
1	Land	149.45	9.49	-	-	158.93
2	Buildings	213.01	6.73	-	-	219.74
3	Plant & Machinery	55.33	-	-	-	55.33
4	Lines & Cables	864.81	140.45	6.75	-	998.51
5	Vehicles	5.11	2.36	-	-	7.47
6	Furniture & Fixtures	22.38	-	0.65	-	21.73
7	Office Equipments	8.53	5.31	1.15	-	12.69
8	Metering Equipment	67.56	10.04	2.20	-	75.40
9	Communication Equipment	19.74	7.61	-	-	27.34
10	Intangible Assets	40.16	6.07	-	-	46.23
11	Assets taken over & pending final valuation	1.20	-	-	-	1.20
12	Solar Power Generation Equipments	0.18	1.00	-	-	1.18
10	**Total Fixed Assets**	**1,447.47**	**189.05**	**10.75**	**-**	**1,625.77**
11	Non depreciable assets (Land & Land Rights)	3.99	-	-	-	3.99
12	**Depreciable assets**	**1,443.47**	**189.05**	**10.75**	**-**	**1,621.78**

5.13.7 The Commission has observed that the closing balance of GFA as shown by the Petitioner is higher than that approved by the Commission vide Tariff Order dated July 20, 2022 for FY 2022-23.

5.13.8 The Commission has considered the opening GFA for FY 2022-23 equal to closing GFA of FY 2021-22 as approved in the True-Up of FY 2021-22. Moreover, considering the approach taken in the True-Up of this Order, the Commission has provisionally considered GFA addition for the year for FY 2022-23 as submitted by the Petitioner after disallowing 25% of the same. Furthermore, closing value of GFA for FY 2022-23 will be the opening GFA for FY 2023-24.

5.13.9 Further, analysis of the depreciation for FY 2022-23 would be carried out during True-Up proceedings based on actual data and annual audited accounts of the Petitioner.

5.14 MISCELLANEOUS EXPENSE

Petitioner's Submission

Loss on Retirement/ Impairment of Asset:

5.14.1 The Petitioner submitted that it has estimated expense on account of sale / retirement of Fixed Assets during FY 2022-23 as Rs.3.23 Crore. The Petitioner has submitted that the Commission had been approving such expenses on actual basis Thus, based on above discussion, the Petitioner requested the Commission to approve the other Items provided in Table below:

TABLE 5-50: OTHER MISCELLANEOUS ITEMS SUBMITTED BY THE PETITIONER FOR FY 2022-23

Sl. No.	Description	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
1	Loss on sales of assets	-	3.23
2	Impact of GST on ancillary services	-	-
	Total	**-**	**3.23**

Commission's Analysis

5.14.2 The Commission observed that the Petitioner for FY 2022-23 has claimed Rs. 3.23 Crore as loss on sale of Fixed Assets. The Commission vide deficiency letter dated January 06, 2023 sought asset-wise working of the same along with basis for computation of Rs. 3.23 Crore. In reply the Petitioner submitted that the based on the actual amount of assets retired during previous years, the Petitioner has estimated loss of Rs. 3.23 Crore on sale of fixed asset during FY 2022-23 subject to truing up as per Audited Annual Accounts.

5.14.3 The Commission has not approved any miscellaneous expense for FY 2022-23 vide Tariff Order dated July 20, 2022. Further, analysis of Miscellaneous expenses for FY 2022-23 would be carried out during True-Up proceedings based on actual data and annual audited accounts of the Petitioner.

5.15 PROVISION FOR BAD AND DOUBTFUL DEBTS

Petitioner's Submission

5.15.1 The Petitioner submitted that the estimated sales, collection efficiency as projected in Business Plan and in view of the debtor's profile, prudent analysis, impending political scenario affecting the collections drives and ageing analysis of receivables for FY 2022-23 and past periods the Petitioner has estimated the Provision for Write-off of Bad and Doubtful Debts for FY 2022-23.

5.15.2 The estimate of the bad debts in accordance with the policy of the Petitioner for FY 2022-23 is as provided in Table Below: -

TABLE 5-51: PROVISION FOR BAD & DOUBTFUL DEBTS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (Rs. Crore)

Sl. No.	Description	Tariff Order for FY 2022-23 dated 10.07.2022	Claimed in APR
1	Revenue billed for the year	2229.86	2,272.06
2	Add: Electricity Duty @ 4.75%	0.00	107.92
3	**Gross Revenue billed for the year**	**2,229.86**	**2,379.98**
4	**Provision for Bad & Doubtful debts**	**22.51**	**47.59**
5	Provision as % of Revenue billed	1.01%	2.00%

Commission's Analysis

5.15.3 The Commission has observed that the Provision for Bad & Doubtful Debts as shown by the Petitioner is higher than that approved by the Commission vide Tariff Order dated July 20, 2022 for FY 2022-23.

5.1.1 The analysis of Provision of bad debts for FY 2022-23 would be carried out during True-Up proceedings based on actual data and annual audited accounts of the Petitioner.

5.16 INCOME TAX

Petitioner's Submission

5.16.1 The Petitioner submitted that Regulation 26 of MYT Regulations, 2019 provides for determination of Income Tax to be considered in ARR for Control period FY 2020-21 to FY 2024-25. The relevant extract of the regulation is reproduced below: -

Quote

*26. **Income Tax***

26.1 Income Tax, if any, on the licensed business of the Licensee shall be treated as expense and shall be recoverable from consumers through Tariff. However, tax on any income other than that through its Licensed business shall not be a pass through, and it shall be payable by the Licensee itself.

26.2 Notwithstanding anything contained in Regulation 26.1, total Income Tax payable by the Licensee, in any year, shall be lowest of the following:

(a) Actual payment made;

(b) ROE allowed in that year x MAT (%) or ROE allowed in that year x Corporate tax (%), whichever is applicable.

26.3 Any under recoveries or over recoveries of Tax on income shall be adjusted every year on the basis of Income Tax assessment under the Income Tax Act 1961, subject to Regulation 26.2 above, as certified by the Statutory Auditors.

Unquote

5.16.2 The Petitioner submitted that, on September 20, 2019, the Central Government introduced "Taxation Laws (Amendment) Act, 2019" wherein a new Corporate Tax Rate at 25.17% including surcharge and cess has been introduced under newly inserted Section 115BAA. However, the new rate U/s 115 BAA can be availed only by foregoing some specified exemption/deduction/allowance otherwise available in the Income Tax Act, 1961 as evident from the extract of the Amendment Act reproduced below: -

Quote

……..

115 BAA (2) For the purposes of sub-section (1), the total income of the company shall be computed—

(i) without any deduction under the provisions of section 10AA or clause (iia) of sub-section (1) of section 32 or section 32AD or section 33AB or section 33ABA or sub-clause (ii) or sub-clause (iia) or sub-clause (iii) of sub-section (1) or sub-section (2AA) or sub-section (2AB) of section 35 or section 35AD or section 35CCC or section 35CCD or under any provisions of 80b [Chapter VI-A under the heading "C.—Deductions in respect of certain incomes" other than the provisions of section 80JJAA];

(ii) without set off of any loss carried forward or depreciation from any earlier assessment year, if such loss or depreciation is attributable to any of the deductions referred to in clause (i);

(iii) without set off of any loss or allowance for unabsorbed depreciation deemed so under section 72A, if such loss or depreciation is attributable to any of the deductions referred to in clause (i); and

(iv) by claiming the depreciation, if any, under any provision of section 32, except clause (iia) of sub-section (1) of the said section, determined in such manner as may be prescribed.

(3) The loss and depreciation referred to in clause (ii) and clause (iii) of sub-section (2) shall be deemed to have been given full effect to and no further deduction for such loss or depreciation shall be allowed for any subsequent year ……

Unquote

5.1.2 Considering the lower tax rate available under the Income Tax Act, the Petitioner keeping the interest of the Consumers in mind has adopted the new tax rate and accordingly has paid Income Tax for FY 2022-23 at the rate of 25.17% as against normal tax rate of 34.94%.

5.16.3 Considering the above Regulation, the Petitioner has computed the income tax liability for FY 2022-23 as shown in Table below: -

TABLE 5-52: INCOME TAX SUBMITTED BY THE PETITIONER FOR FY 2022-23 (Rs. Crore)

Sl. No.	Nature of Tax	Reference	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
1	Return on Equity	a	58.10	77.31
2	Income Tax Rate	b	25.17%	25.17%
3	**Total Tax Expense**	**c=a x b/(1-b)**	**19.54**	**26.00**

5.1.3 The Petitioner submitted that since the Income Tax Liability as shown above has been computed in accordance with MYT Regulations, 2019, the Petitioner requested the Commission to approve and considering the same for APR for FY 2022-23.

Commission's Analysis

5.16.4 The Commission has observed that the Total Tax Expense as shown by the Petitioner is higher than that approved by the Commission vide Tariff Order dated July 20, 2022 for FY 2022-23. Further analysis of Income Tax for FY 2022-23 would be carried out during True-Up proceedings based on actual data and annual audited accounts of the Petitioner.

5.17 CONTINGENCY RESERVE

Petitioner's Submission

5.17.1 The Petitioner submitted that Regulation 27 of the MYT Regulations, 2019 provides for appropriation of Contingency Reserve as:

Quote

27. Contribution to Contingency Reserve

27.1 Where the Licensee has made a contribution to the Contingency Reserve, a sum not less than 0.25% and not more than 0.5% of the original cost of fixed assets may be allowed annually towards such contribution in the calculation of ARR:

Provided that where the amount of such Contingency Reserves exceeds five (5) per cent of the original cost of fixed assets, no further contribution shall be allowed:

Provided further that such contribution shall be invested in securities authorised under the Indian Trusts Act, 1882 within a period of six months of the close of the Year.

27.2 The Contingency Reserve shall not be drawn upon during the term of the Licence except to meet such charges as may be approved by the Commission as being:

a) Expenses or loss of profits arising out of accidents, strikes or circumstances which the management could not have prevented;

b) Expenses on replacement or removal of plant or works other than expenses requisite for normal maintenance or renewal;

c) Compensation payable under any law for the time being in force and for which no other provision is made.

Unquote

5.17.2 The Petitioner submitted that the Commission in its Tariff Order dated December 04, 2020 has not allowed the provision of contingency reserve to reduce extra burden on the consumers. However, the contingency reserve is created to meet the eventualities in the nature of major calamities, act of God etc. and thereby, causing huge loss to the network. In any case, the amount so allocated, can be used with prior permission of the Commission only. Therefore, the Petitioner has considered creation of contingency reserve at lower limit of 0.25% of Opening Gross Fixed Asset as per the MYT Regulations, 2019 as shown in Table below: -

TABLE 5-53: CONTINGENCY RESERVE SUBMITTED BY THE PETITIONER FOR FY 2022-23

(Rs. Crore)

Sl. No.	Particulars	Claimed in APR
1	Opening GFA (at original value)	1,966.05
2	% of Opening GFA	0.25%
3	Contribution to Contingency Reserve	4.92

5.17.3 Thus, as a matter of prudent practice, the Petitioner requested the Commission to allow provision of contingency reserve in ARR for FY 2022-23 as claimed above.

Commission's Analysis

5.17.4 The Commission has noted the same. Further analysis of Contingency Reserve for FY 2022-23 would be carried out during True-Up proceedings based on actual data and annual audited accounts of the Petitioner.

5.18 RETURN ON EQUITY (ROE)

Petitioner's Submission

5.18.1 The Petitioner submitted that as per Regulation 22 of the MYT Regulations, 2019, Return on Equity shall be allowed at 15% on the equity base determined in accordance with the MYT Regulations, 2019. Accordingly, the computation of equity base and Return on Equity for FY 2022-23 is given in Table below: -

TABLE 5-54: COMPUTATION OF RETURN ON EQUITY SUBMITTED BY THE PETITIONER FOR FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Ref.	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
1	Regulatory Equity Base at the beginning of the year	a	369.47	494.12
2	Asset Capitalized during the year net of Consumer Contribution and Retirement	b	171.22	142.06
3	Equity portion of Assets Capitalised during the year	c	35.69	42.62
4	**Regulatory Equity Base at the end of the year**	**d=a+c**	**405.16**	**536.74**
5	Return on Opening Regulatory Equity Base @ 15%	e=ax15%	55.42	74.12
6	Return on Addition to Equity Base during the year @15%	f=cx15%/2	2.68	3.20
7	**Total Return on Equity**	**g=e+f**	**58.10**	**77.31**

Commission's Analysis

5.18.2 The Commission has observed that the computation on Return on Equity as shown by the Petitioner is higher than that approved by the Commission vide Tariff Order dated July 20, 2022 for FY 2022-23.

5.18.3 The Commission has considered the opening equity for FY 2022-23 equal to closing equity of FY 2021-22 as approved in the True-Up of FY 2021-22. Further, the Commission has considered equity addition for the year as 30% of net capitalisation considered for FY 2022-23. Furthermore, closing value of equity for FY 2022-23 will be the opening GFA for FY 2023-24, detailed computation is shown in the subsequent Chapter.

5.18.4 The values of APR will form the basis of determination of ARR. The Commission has not done prudence check of the submission made for APR, however for the purpose of determination of Return on Equity, the closing loan value approved in True-up and the equity addition during the year has been provisionally considered, detailed computation is shown in the subsequent Chapter.

5.18.5 Further, analysis of Return on Equity for FY 2022-23 would be carried out during True-Up proceedings based on actual data and annual audited accounts of the Petitioner.

5.19 NON-TARIFF INCOME

Petitioner's Submission

5.19.1 The Petitioner submitted that the non-tariff income includes income from statutory investments, miscellaneous receipts from consumers, delayed payment surcharge and various other non-tariff incomes generated by the Petitioner from other businesses. The details of such income estimated for FY 2022-23 is given in the Table below:

TABLE 5-55: NON-TARIFF INCOME AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (Rs. CRORE)

Sl. No.	Particulars	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
1	Income from Contingency Reserves Investments	22.99	0.16
2	Miscellaneous Receipts from Consumers		1.38
3	Miscellaneous Receipts from other sources		2.41
4	Delayed Payment Surcharge		4.80
5	**Total Non-Tariff Income**	**22.99**	**8.75**

Commission's Analysis

5.19.2 The Commission has observed that the total Non-Tariff Income as submitted by the Petitioner is lower than that approved by the Commission vide Tariff Order dated July 20, 2022.

5.19.3 Further, analysis of Non-Tariff Income for FY 2022-23 would be carried out during True-Up proceedings based on actual data and annual audited accounts of the Petitioner.

5.20 REVENUE FROM SALE OF POWER

Petitioner's Submission

5.20.1 The Petitioner has estimated category-wise sales, revenue and average realization for FY 2022-23 as in below table-:

TABLE 5-56: REVENUE SUBMITTED BY THE PETITIONER FOR FY 2022-23

Sl. No.	Category	Sales (MU's)	Revenue (Rs. Cr.)	ABR (Rs/kWh)
1	LMV-1: Domestic Light, Fan & Power	926.22	596.94	6.44
2	LMV-2: Non Domestic Light & Fan & Power	51.82	56.39	10.88
3	LMV-3: Public Lamps	37.56	32.60	8.68
4	LMV-4: Institutions	16.38	16.14	9.86
5	LMV-5: Private Tube Wells	16.32	3.40	2.08
6	LMV 6: Small and Medium Power	117.96	107.10	9.08
7	LMV-7: Public Water Works	28.04	27.13	9.68
8	LMV-8: STW and Pumped Canals	0.03	0.03	11.94
9	LMV-9: Temporary Supply	52.17	49.62	9.51
10	LMV-11: Electric Vehicle Charging	0.21	0.13	6.36
11	HV-1: Non Industrial Bulk Power	341.97	315.41	9.22
12	HV-2: Large and Heavy Power	1,450.44	1,067.15	7.36
13	**Total**	**3,039.13**	**2,272.06**	**7.48**

5.20.2 The Petitioner submitted that the Commission vide its Tariff Order dated July 20, 2022 has included the deemed revenue against the Captive Consumption of the Petitioner at the rate of LMV-4 (B) and Sales (MU) at the time of True up for FY 2020-21. Aggrieved by the aforesaid treatment, it has filed an appeal no 398 of 2022 before the Hon'ble APTEL, which is pending for adjudication.

5.20.3 As the aforesaid matter is still pending before the Hon'ble APTEL, the Petitioner has considered the captive consumption for FY 2022-23 under Category 4(B) as per the directions of the Commission, however, the revenue has been considered at NIL value as per past practices. The Petitioner submitted if the Captive Consumption in MUs is not included in the Sales, the same will result in incorrect computation of the T&D Losses. Therefore, it is very much necessary to include the Captive Consumption in MUs in the Sales. The Petitioner was earlier considering unit consumed captively under LMV-4 (A) category.

5.20.4 The Petitioner further submitted that all the connections for captive purposes are metered and are duly reconciled every month. The recorded energy in the meters has been considered in the Sales since inception and has also been allowed by the Commission accordingly.

5.20.5 The Petitioner also submitted that if Commission decides to include the Captive Consumption both Revenue (Rs.) and Sales (MU), then corresponding actual expenses in the A&G should also be allowed as the base A&G expenses does not include expenses on account of Captive Consumption due to the reason that the Commission has first time decided to include the same in Revenue of FY 2022-23.

5.20.6 The Petitioner submitted that the Commission earlier directed to convert all unmetered connections under LMV-1 & LMV-5 categories to metered consumers by the end of March 31 2023 and the Petitioner is making its all-out efforts to achieve the same. The supply hours & consumption have significantly increased in rural areas, the unmetered sales in LMV-1 and LMV-5 categories (including supplementary sales from theft cases) have been estimated at 5.95 MU and 2.76 MU during FY 2022-23.

5.20.7 The Petitioner submitted that the in case of LMV-1 and LMV-5, unmetered sales are accounted based on consumption pattern / use of the electricity in the concerned area. That there are 118 villages in Petitioner's licensed area, which also has lot of migrant labour/ encroachers who often found indulging into theft of electricity. Apart from the above due to ongoing development activities, in many cases, the land though acquired by GNIDA, but continue to be utilised for farming activities by encroachers/ earlier occupants and indulge into pilferage of power, therefore, in order to curb theft of power and T&D Losses, the Company regularly conducts loss control drives in these areas to remove unauthorized tapings as well as recovery of sales through assessment under Section 126 read with 135 of the Act for unauthorized use/theft of Electricity which otherwise could not be accounted for. The amount so recovered against such cases is being accounted under the same category. Since, these are unauthorized connections, the amount assessed and recovered against electricity theft from such consumers under

Section 126 read with 135 of the Act do not get reflected in the number of consumers and their consumption when computed on the basis of only authorised consumer numbers and connected load as mentioned in the forms prescribed by the Commission. It is pertinent to mention here that such assessed and recovered amount is also included in the sales of LMV-1 and LMV-5 categories which the Commission has been wrongly considering as "Excess Sales".

5.20.8 The Petitioner on accounting for assessed consumption in theft cases is in sync with the judgment of the Hon'ble APTEL in matter of Reliance Infrastructure Limited Vs. MERC & Ors. in Appeal No. 85 of 2012 wherein Hon'ble APTEL held as follows: -

Quote

……….

7.11 We find that the assessment of electricity charges is made by the Assessing Officer as per the procedure laid down in the 2003 Act, after giving opportunity to the concerned person to file objection, if any, as against the provisional assessment. Only after affording opportunity of hearing to such person, the Assessing Officer passes the final order of assessment of the electricity charges payable by such person. The assessed electricity charges are made by the assessing officer after inspection of the premises or after inspection of equipments, gadgets machines, etc., connected at the premises or after inspection of records. The assessed electricity charges are based on the assessed power/energy consumption and is charged at twice the tariff applicable for the relevant category. Thus, the assessed energy has to be considered as supplied by the distribution licensee to the concerned person.

7.12 According to the State Commission, only the energy recorded in the meter is required to be considered for computation of distribution loss. We are not in agreement with the contention of the State Commission. A large number of agriculture consumers in the country are still being supplied electricity without meters. The consumption of such unmetered consumers are being assessed by the State Commission and considered as sale to agriculture consumers. The unauthorized use of electricity assessed by the Assessing Officer as per Section 126

<u>of the Act is nothing but consumption of electricity supplied by the distribution licensee.</u>

……………..

7.14 If the distribution licensee has plugged the energy "leakages" in the system through vigilance initiative, it has not only ensured that the recorded consumption would increase in future but has also ensured that the consumption not recorded in the meter in the past is also retrieved by charging the concerned person for such energy.

7.15 <u>There is no dispute that the pilfered electricity has also been consumed and has been procured by the distribution licensee for distributing in its licensed area. The pilfered energy has not been recorded in the meter and can only be assessed</u>. Section 126 of the 2003 Act specifically provides for assessment of charges for unauthorized use of electricity. The rate for such charges is at twice the tariff applicable for the relevant category as approved by the State Commission. The charges will have to be worked out by assessment of the electricity consumption by inspection of place or premises, inspection of equipments, gadgets, etc., found connected or used or after inspection of records, etc. as specified in Section 126 (1) of the Act. Therefore, the assessed energy has to be considered as consumed. If the licensee has been able to reduce the distribution losses with vigilance drive, it should be given the credit for efficiency gain if it helps in reducing the loss below the target level. Therefore, we hold that the assessed energy as a result of vigilance drive should be accounted for while computing the distribution loss.

………….

Unquote

5.1.4 The Petitioner further submitted the it is also important to mention that the Commission has been computing the normative consumption of unmetered categories based on the number of consumers as at the end of the year. Accordingly, the consumption of consumers converted / disconnected during the year do not get considered in the process. Thus submitted to compute the normative consumption on the basis average number of consumers based on average of opening and closing consumers.

5.20.9 The Petitioner requested to consider the estimated sales and revenue for the purpose of Annual Performance Review of FY 2022-23.

Commission's Analysis

5.20.10 The analysis of Sales and Revenue for FY 2022-23 would be carried out during True-Up proceedings based on actual data and annual audited accounts of the Petitioner.

5.21 ARR SUMMARY & REVENUE GAP

Petitioner's Submission

5.21.1 Based on above mentioned Expenditure and Revenue, the Aggregate Revenue Requirement for FY 2022-23 as computed on the basis of the MYT Regulations, 2019 is given in Table below: -

TABLE 5-57: SUMMARY OF ARR SUBMITTED BY THE PETITIONER FOR FY 2022-23 (Rs. Crore)

Sl.No.	Particulars	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
1	Power Purchase Expenses for the Year	1,323.80	1700.37
2	Transmission Charges	207.56	227.39
3	Net Employee cost (Incl. Retiral Benefits)	19.08	66.90
4	A&G expenses	14.10	26.63
5	R&M expenses	41.31	64.72
6	Smart Metering / DT Metering / SOP implementation OPEX	-	0.00
7	Interest Charges	56.32	70.09
8	Depreciation	47.42	63.85
9	Taxes (Income Tax & MAT)	19.54	26.00
10	Provision for Bad & Doubtful Debts	22.51	47.60
11	Loss on Sale of Fixed Asset	-	3.23
12	Change in Law (Impact of GST)	-	0.00
13	Contingency Reserve	-	4.92
14	Return on Equity	58.10	77.31
15	**Aggregate Revenue Requirement**	**1,809.74**	**2378.99**

Sl.No.	Particulars	Tariff Order for FY 2022-23 dated 20.07.2022	Claimed in APR
16	Less: Revenue from Existing Tariff	2,006.88	2272.06
17	Less: Revenue from Open Excess Charges		1.10
18	Less: Non-Tariff Income	22.99	8.75
19	**Revenue Gap / (Surplus)**	**(220.13)**	**97.08**
20	Revenue Gap/ (Surplus) from Prev. Year	(951.05)	36.12
21	Carrying Cost of Regulatory Asset	(50.40)	8.64
22	**Total Revenue Gap /(Surplus) carried forward**	**(1,221.58)**	**141.84**

Commission's Analysis

5.21.2 The Commission has observed that the claimed Aggregate Revenue Requirement for FY 2022-23 as submitted by the Petitioner is higher than that approved by the Commission vide Tariff Order date July 20, 2022. Further, the analysis of Aggregate Revenue Requirement (ARR) for FY 2022-23 would be carried out during True-Up proceedings based on actual data and annual audited accounts of the Petitioner.

5.22 CARRYING COST

Petitioner's Submission

5.22.1 The Petitioner submitted that the Regulation 28.5 of MYT Regulations, 2019 provides for allowance of carrying cost on regulatory assets. The relevant extract of the Regulation 28.5 is reproduced below for reference:

Quote

28.5 Carrying cost for the gap / surplus of the Distribution Licensee will be provided by the Commission after prudence check at the interest rates as provided for working capital in these Regulations.

Unquote

5.22.2 Based on the same principles, the carrying cost of Regulatory Asset created and subsequent recoveries till FY 2022-23 is given in the Table below: -

TABLE 5-58: CARRYING COST SUBMITTED BY THE PETITIONER FOR FY 2022-23 (Rs. Crore)

Sl. No	Particulars	Ref.	Tariff Order for FY 2022-23 dated 20.07.2020	Claimed in APR
1	**Regulatory Assets/(Surplus) at the beginning of Year**	a	(951.05)	36.12
2	Addition to Regulatory Assets during the year	b	(220.13)	97.08
3	Closing Regulatory Assets (before Carrying cost for the year)	c=a+b	(1,171.17)	133.20
4	Average Regulatory Asset	d=(a+c)/2	(1,061.11)	84.66
5	Applicable Interest Rate for Working Capital Finance	f	9.50%	10.20%
6	**Carrying Cost of Regulatory Asset**	**g=ex f**	**(50.40)**	**8.64**

Commission's Analysis

5.22.3 The analysis of Aggregate Revenue Requirement (ARR), Revenue Gap and corresponding carrying cost for FY 2022-23 would be carried out during True-Up proceedings based on actual data and annual audited accounts of the Petitioner.

6 AGGREGATE REVENUE REQUIREMENT (ARR)

6.1 INTRODUCTION

6.1.1 The Commission in earlier chapters of this Order has undertaken Truing-Up for FY 2021-22 based on the audited accounts and APR for FY 2022-23. The Petitioner submitted that as per timeline specified in Regulation 4.1 of the MYT Regulations, 2019, the Distribution Licensee was required to submit petition for True-up for FY 2021-22, APR for FY 2022-23 and ARR for FY 2023-24 by November 30, 2022. The Petitioner filed the Petition for determination of True-Up for FY 2021-22, APR for FY 2022-23 and ARR & Tariff for FY 2023-24 on November 30, 2022.

6.1.2 In this Chapter, the Commission has discussed in detail each component of ARR for FY 2023-24.

6.1.3 The Regulation 5.6 of the MYT Regulations, 2019 specifies as under:

Quote

Based on the approved Business Plan the ARR Petition shall be filed by the Licensee that shall include forecast of ARR and expected revenue from existing Tariff. Further, the Licensee shall also submit the category/ sub-category wise proposed Tariff, that would meet the gap in the ARR, including unrecovered revenue gaps of previous years to the extent proposed to be recovered.

Unquote

6.1.4 The components of the ARR have been specified in Regulation 41 of the MYT Regulations, 2019 which is reproduced below:

Quote

41 Components of ARR for Distribution licensee

41.1 The wheeling charges and Tariff for retail supply of the distribution licensee shall provide for the recovery of the ARR, as approved by the commission and comprising the following components:

a) Power purchase expenses;

b) Inter-state Transmission charges;

c) Intra-state Transmission charges

d) SLDC fees & Charges

e) Operation and Maintenance expenses;

f) Depreciation;

g) Interest on Loan capital;

h) Interest on Working Capital ;

i) Provision for Bad and Doubtful Debts ;

k) Contribution to Contingency Reserves;

l) Return on Equity;

m) Income Tax;

minus:

n) Non-Tariff Income; and

o) Income from Other Business, to the extent stipulated in these regulations

Unquote

6.2 BILLING DETERMINANTS

Petitioner's Submission

6.2.1 Regulation 5.5 of MYT Regulations, 2019 specifies as under:

Quote

5.5 The forecast of expected revenue from Tariff shall be based on the following:

(a) In the case of a Transmission Licensee, estimate of ARR or estimates of Transmission Capacity allocated to Transmission System Users, as appropriate;

(b) In the case of a Distribution Licensee, estimate of quantum of electricity to be supplied to consumers and wheeled on behalf of Distribution System Users;

Provided that the Distribution Licensee shall submit relevant details of category/ sub-category wise Number of Consumers, Connected load and Energy Sales projections, status of metering, feeder level/ distribution transformer metering, diversity factor for various category of consumers taking seasonality into consideration, etc., for each Distribution Licensee area;

(c) Existing and proposed Tariff as on the date of filing of the Petition.

Unquote

6.2.2 Further, Regulation 42 of MYT Regulations, 2019 specifies as under:

Quote

42.1 The Distribution Licensee shall submit a forecast of the expected sales along with number of hours of supply to each Tariff category / Sub-category and to each Tariff slab within such Tariff category / Sub-category, to the Commission for approval as stipulated in these Regulations:

Provided that sales forecast shall be based on past trends in each of the slabs of consumer categories. The Compounded Annual Growth Rate (CAGR) of past seven years of sales within each of the slabs of a consumer category as per audited books of account, or if not available, then provisional accounts, will be considered:

Provided further that the Distribution Licensee shall submit relevant details regarding category-wise sales separately for each Distribution Franchisee area within its Licence area, as well as the aggregated category-wise sales in its Licence area.

42.2 The sales forecast shall be consistent with the load forecast prepared as part of the power procurement plan under Part C of these Regulations and shall be based on past data and reasonable assumptions regarding the future.

Unquote

6.2.3 The Petitioner submitted that the Commission vide Mid Term Review of Business Plan Order dated November 22, 2022 has approved the no. of consumers, connected load and sales for FY 2023-24 as given in Table below:

TABLE 6-1: SUMMARY OF BILLING DETERMINANTS APPROVED BY THE COMMISSION FOR FY 2023-24 VIDE MID TERM REVIEW OF BUSINESS PLAN ORDER DATED 22.11.2022

Sl. No.	Category	No. of consumers (No.)	Connected Load (in MW)	Sales (MU)
1	LMV-1: Domestic Light, Fan & Power	1,54,407	643.32	980.70
2	LMV-2: Non-Domestic Light & Fan & Power	5,060	47.77	59.28
3	LMV-3: Public Lamps	499	12.58	37.76
4	LMV-4: Institutions	620	8.30	18.89
5	LMV-5: Private Tube Wells	1,292	6.50	20.45

Sl. No.	Category	No. of consumers (No.)	Connected Load (in MW)	Sales (MU)
6	LMV 6: Small and Medium Power	3,880	100.24	130.94
7	LMV-7: Public Water Works	320	13.88	30.48
8	LMV-8: STW and Pumped Canals	-	-	-
9	LMV-9: Temporary Supply	933	19.69	54.58
10	Electric Vehicle Charging (LMV-11)	23	1.81	1.01
11	HV-1: Non-Industrial Bulk Power	285	192.60	435.50
12	HV-2: Large and Heavy Power	1,040	560.06	1,546.00
13	**Total**	**1,68,359**	**1,606.75**	**3,315.59**

6.2.4 The Petitioner submitted that there are 118 villages in its licensed area, which has lot of migrant labour / encroachers who often found indulging into theft of electricity. Apart from the above, due to ongoing development activities, the land though acquired by GNIDA, but continue to be utilised for farming activities by encroachers / earlier occupants and indulge into pilferage of power, therefore, in order to curb theft of power and T&D Losses, the Petitioner regularly conducts loss control drives in those areas to remove unauthorized tapings as well as recovery of sales through assessment under Section 126 read with Section 135 of the Act for unauthorized use / theft of Electricity which otherwise could not be accounted for. The amount so recovered against such cases is being accounted under the same category. Since, these are unauthorized connections, the amount assessed and recovered against electricity theft from such consumers under Section 126 read with Section 135 of the Act do not get reflected in the number of consumers and their consumption when computed on the basis of only authorized consumer numbers and connected load as mentioned in the forms prescribed by the Commission.

6.2.5 In view of the above, the projected no. of consumers, connected load and sales for FY 2023-24 as given in Table below:

TABLE 6-2: SUMMARY OF BILLING DETERMINANTS SUBMITTED BY THE PETITIONER FOR FY 2023-24

Sl. No.	Category	No. of consumers (No.)	Connected Load (in MW)	Sales (MU)
1	LMV-1: Domestic Light, Fan & Power	1,54,407	643.32	980.70
2	LMV-2: Non Domestic Light & Fan & Power	5,060	47.77	59.28

Sl. No.	Category	No. of consumers (No.)	Connected Load (in MW)	Sales (MU)
3	LMV-3: Public Lamps	499	12.58	37.76
4	LMV-4: Institutions	620	8.30	18.89
5	LMV-5: Private Tube Wells	1,292	6.50	20.45
6	LMV 6: Small and Medium Power	3,880	100.24	130.94
7	LMV-7: Public Water Works	320	13.88	30.48
8	LMV-8: STW and Pumped Canals	-	-	-
9	LMV-9: Temporary Supply	933	19.69	54.58
10	LMV-11: Electric Vehicle Charging	23	1.81	1.01
11	HV-1: Non Industrial Bulk Power	285	192.60	435.50
12	HV-2: Large and Heavy Power	1,040	560.06	1,546.00
13	**Total**	**1,68,359**	**1,606.75**	**3,315.59**

6.2.6 The Petitioner further submitted that the Commission vide its Tariff Order of FY 2022-23 dated July 20, 2022 has included the deemed revenue against the Captive Consumption of the Company at the rate of LMV-4 (B) and Sales (MU) at the time of True up for FY 2020-21. Aggrieved by the aforesaid treatment, it has filed an appeal before the Hon'ble APTEL, which is pending.

6.2.7 Thus, for the purpose of preparation of projections of billing determinants for FY 2023-24, it has considered the captive consumption under Category 4(B) as per the directions of the Commission, however, the revenue has been considered at NIL value as per past practices. It is further apprised that if the Captive Consumption is not included in sales, the same will result in incorrect computation of T&D Losses. Therefore, it is very much necessary to include the Captive Consumption in sales. The Petitioner also mentioned that earlier it was considering unit consumed captively under LMV-4 (A) category.

6.2.8 The details of the Captive Consumption and corresponding amount as per the tariffs of 4 (B) category are given in Table below:

TABLE 6-3: CAPTIVE CONSUMPTION REVENUE (Rs. Crore) AND SALES (MU)

Particulars	FY 2023-24	Remark
Sales (MU)	3.40	Included in Sales
Revenue (Rs. Cr.)	2.93	Not included in Revenue

6.2.9 The Petitioner submitted that all the connections for captive purposes are metered and are duly reconciled every month. The recorded energy in the meters has been considered in the Sales since inception and has also been allowed by the Commission accordingly. It was also considered and approved in the same manner by the Commission at the time of approving Sales, Revenue and Billing Determinants in its Business Order for the Control Period from FY 2020-21 to FY 2024-25 dated November 26, 2020. The impugned change in methodology is also in complete contradiction to the methodology followed hitherto as well as while approving the Business Plan Order. The aforesaid treatment by the Commission is also against the recently pronounced judgement of Hon'ble Supreme Court in the matter of October 18, 2022.

6.2.10 The Petitioner further submitted that the Hon'ble Tribunal has dealt with the issue of self / captive consumption by a Distribution Licensee in the matter of Arun Kumar Datta Vs. DERC & Anr. in Appeal No.195 of 2013 [Judgement dated February 09, 2015] wherein it was observed as:

Quote

13.4 We feel that the Appellant should have installed meters for self consumption in all its offices, call centres, substations, etc. The Respondent no.2 does not need specific instructions for the same. When the Respondent no.2 is including self consumption in its energy sale figures, then it was legally bound to supply electricity for own consumption only through correct meters. We feel that the State Commission should have allowed self consumption only to the extent of actual consumption for metered installations. The formula proposed by the Respondent no. 2 for calculating own consumption in its installations is for calculating energy consumption for consumers in case of faulty/tempered meters. Accordingly, we direct the State Commission to redetermine the self consumption based on the metered data only. We also do not feel that this would result in change in procedure in true up with respect to the MYT order dated 23.02.2008. In the MYT order the consumption is based on the projections. In the MYT order the State Commission has not approved that the self consumption would not be metered and would only be assessed by a formula considering the load, number of days/hours, load factor, etc.

13.5 As regards contention of the Appellant for determination of AT&C loss, we feel that if the self consumption is deducted from energy sales figures then corresponding reduction has to be effected in the energy input into the distribution system also. In view of our directions in para 13.4, we do not want to give any direction with regard to procedure for determination of AT&C loss in the true-up of FY 2010-11.

Unquote

6.2.11 The Petitioner further submitted that as per the above Judgement of the Hon'ble Tribunal, it is also clear that self / captive consumption by Distribution Licensee for running its offices, call centers, substations, Distribution Business etc. is to be allowed by the Commission to the extent of actual consumption for metered installations.

6.2.12 The Petitioner submitted to continue the treatment of captive consumption as NIL value, as considered by the Commission in its previous Tariff Orders. Captive consumption cannot be treated as sales. Sale in its grammatical means any transfer of property in goods by one person to another and there is no transfer in case of captive consumption. Alternatively, if the Commission decides to include Captive Consumption both Revenue (Rs.) and Sales (MU), then corresponding actual A&G expenses should also be allowed, as the base A&G expenses does not include expenses on account of Captive Consumption. The summary of category-wise projected sales, revenue and average realization for FY 2023-24 based on the rates approved by the Commission vide Tariff Order of FY 2022-23 dated July 20, 2022 and requested the Commission to consider the same as given in the Table below: -

TABLE 6-4: PROJECTED ENERGY SALES AND REVENUE SUBMITTED BY THE PETITIONER FOR FY 2023-24

Sl. No.	Category	Sales (MU's)	Revenue (Rs. Crore)	ABR (Rs/kWh)
1	LMV-1: Domestic Light, Fan & Power	980.70	595.69	6.07
2	LMV-2: Non Domestic Light & Fan & Power	59.28	59.70	10.07
3	LMV-3: Public Lamps	37.76	31.89	8.44
4	LMV-4: Institutions	18.89	16.88	8.94
5	LMV-5: Private Tube Wells	20.45	4.40	2.15
6	LMV 6: Small and Medium Power	130.94	112.13	8.56
7	LMV-7: Public Water Works	30.48	28.20	9.25

Sl. No.	Category	Sales (MU's)	Revenue (Rs. Crore)	ABR (Rs/kWh)
8	LMV-8: STW and Pumped Canals			
9	LMV-9: Temporary Supply	54.58	49.46	9.06
10	LMV-11:Electric Vehicle Charging	1.01	0.65	6.42
11	HV-1: Non Industrial Bulk Power	435.50	381.14	8.75
12	HV-2: Large and Heavy Power	1,546.00	1,098.69	7.11
13	**Total**	**3,315.59**	**2,378.83**	**7.17**

Commission's Analysis

6.2.13 The Commission observed that the Petitioner has claimed captive consumption as part of energy sales towards the LMV 4(B) category and the revenue corresponding to the such sales has been considered NIL for FY 2021-22. Also, the Petitioner has submitted that all the connections used for the captive consumption purposes are metered in nature. The Commission observed that the self / captive consumption in the case of State Discoms is billed under LMV-4(A) / HV-1 category according to Rate Schedule. The same approach is also being applied for NPCL.

6.2.14 The Petitioner has claimed additional O&M regarding the payment of the captive consumption of electricity bills, however, the Commission has already finalised the base values of O&M for the control period & hence it would not like to go into the merit of the matter at this stage and proceedings. Further, an Appeal filed by the Petitioner is pending before the Hon'ble APTEL in this matter. However, the deemed revenue is provisionally not being considered in this Tariff Order. The final treatment will be done as per the orders passed by Hon'ble APTEL in the above said Appeal.

6.2.15 The Petitioner has not projected any excess sales under unmetered categories of LMV-1 and LMV-5 in ARR of FY 2023-24, however, any excess sale found under LMV-1 and LMV-5 at the time of true up of FY 2023-24 will be dealt appropriately as detailed in True up chapter. Accordingly, the billing determinants for FY 2023-24 is approved as claimed by the Petitioner, subject to prudence check at the time of truing up as shown in the Table below: -

TABLE 6-5: APPROVED BILLING DETERMINANTS FOR FY 2023-24

Sl. No.	Category	No. of Consumers (No.)	Connected Load (in MW)	Sales (MU)
1	LMV-1: Domestic Light, Fan & Power	1,54,407	643.32	980.70
2	LMV-2: Non Domestic Light & Fan & Power	5,060	47.77	59.28
3	LMV-3: Public Lamps	499	12.58	37.76
4	LMV-4: Institutions	620	8.30	18.89
5	LMV-5: Private Tube Wells	1,292	6.50	20.45
6	LMV 6: Small and Medium Power	3,880	100.24	130.94
7	LMV-7: Public Water Works	320	13.88	30.48
8	LMV-8: STW and Pumped Canals	-	-	-
9	LMV-9: Temporary Supply	933	19.69	54.58
10	LMV-11: Electric Vehicle Charging	23	1.81	1.01
11	HV-1: Non Industrial Bulk Power	285	192.60	435.50
12	HV-2: Large and Heavy Power	1,040	560.06	1,546.00
13	**Total**	**1,68,359**	**1,606.75**	**3,315.59**

6.3 ENERGY BALANCE AND DISTRIBUTION LOSSES

Petitioner's Submission

6.3.1 The Petitioner submitted that the Commission vide its Business Plan Order dated November 22, 2022 approved the distribution loss for FY 2023-24 as 7.63% and also vide its Affidavit dated November 01, 2022 submitted that it is making all efforts to achieve the Distribution Loss as approved by the Commission. The Energy Balance and Distribution losses for FY 2023-24 projected by Petitioner is as follows: -

TABLE 6-6: ENERGY BALANCE FOR FY 2023-24

Particulars	UOM	Approved in Commission Business Plan Order dated 22.11.2022	ARR Petition for FY 2023-24
Energy Sales	MU	3,589.47	3,589.47
Total Energy Losses	%	7.63%	7.63%
	MU	273.88	273.88
Energy Purchase	MU	3,315.59	3,315.59

Commission's Analysis

6.3.2 The Commission has already deliberated on the Distribution Loss Trajectory of the Petitioner for the Control Period FY 2020-21 to FY 2024-25 and approved the Distribution Loss Trajectory for the Petitioner in its Mid Term Review of Business Plan Order dated November 22, 2022. Accordingly, the Commission approved the distribution loss for FY 2023-24 in line to Commission's Business Plan Order dated November 22, 2022 as shown below: -

TABLE 6-7 : APPROVED ENERGY BALANCE AND DISTRIBUTION LOSS FOR FY 2023-24

S. No.	Category	UOM	ARR Petition for FY 2023-24	Approved for FY 2023-24
1	Energy Sales (MU)	MU	3315.59	3315.59
2	Distribution loss %	%	7.63%	7.63%
3	Distribution losses (MU)	MU	273.88	273.88
4	**Energy Purchase at Discom Periphery (MU)**	**MU**	**3589.47**	**3589.47**
5	Energy Purchase from Sources connected at NPCL network	MU	-	108.09
6	Energy available at NPCL periphery	MU	-	3,481.38
7	Intra State Losses	%	3.19%*	3.22%**
8	**Energy Available at network connected at Intra-State Network (UPPTCL)**	**MU**	**3,707.80**	**3,597.21**
9	Energy Purchase from Stations connected to Intra-State Transmission network (UPPTCL)	MU	-	35.16
10	Energy available at State Periphery	MU	-	3,562.04
11	Inter-State Losses	%	3.63%*	3.75%***
12	Energy Purchase at network connected @ Inter-State Network (Ex-bus/PGCIL)	MU	-	3,700.83
13	**Total Power Purchase Required & Billed**	**MU**	**3,847.41**	**3,844.08**

** Petitioner has considered the losses on cumulative units, whereas these losses should be applicable to respective sources.*
*** Intra-State Losses as approved by the Commission.*
**** Inter-State Losses projected for FY 2023-24.*

6.4 POWER PROCUREMENT

Petitioner's Submission

6.4.1 The Petitioner submitted that considering the Energy Balance, the Company has prepared its power procurement Plan for FY 2023-24 in line with Demand Estimates and taking into consideration its present and proposed Long Term / Medium Term Contracts for base load and procurement through Short-Term Contracts for meeting requirement over base load / exigencies etc. to optimize its power purchase cost. Accordingly, the Petitioner has planned to procure Power through mix of sources such as Long Term, Medium Term, Short Term, Power Exchanges and Renewable Sources etc. to meet its demand as well as RPO Obligations.

6.4.2 The Petitioner submitted that based on the demand estimates for FY 2023-24 the Petitioner expects its demand during the FY 2023-24 as shown in table below: -

Table 6-8: Demand Estimates for FY 2023-23

Month	RTC (in MW)	Peak (in MW)
Apr-23	447	495
May-23	485	533
Jun-23	504	549
Jul-23	496	541
Aug-23	472	519
Sep-23	475	518
Oct-23	405	441
Nov-23	311	338
Dec-23	344	374
Jan-24	378	412
Feb-24	360	392
Mar-24	383	416

6.4.3 The Petitioner submitted that the above estimated peak power requirement is average of 19-24 Hours. The instantaneous peak demand (maximum peak) is estimated to be approximately 15% higher than average peak requirement based on current trend. The Petitioner submitted that considering, the energy balance, it has planned to meet its energy requirement for FY 2023-24 from the following sources: -

Long Term Power Purchase Agreement (LTPPA)

6.4.4 The Petitioner submitted that Long Term PPA with M/s DIL was approved by the Commission vide its Tariff Order dated April 20, 2016. During FY 2023-24, the drawl under the aforesaid LTPPA is estimated at 1277.54 MU at DIL (Ex-Bus) which is equivalent to normative availability i.e., 85% NAPAF specified in the Generation Tariff Regulations, 2019. The Petitioner further submitted that it has computed the cost of power on the basis of tariff approved by the Commission for determination of tariff for FY 2019-20 to FY 2023-24 in its Petition No. 1531 of 2019 from M/s DIL. Accordingly, the summary of power procured from M/s DIL is provided in the Table below:

TABLE 6-9: LONG TERM POWER PROCUREMENT SUBMITTED BY PETITIONER FOR FY 2023-24 (Rs. Crore)

S. No.	Description	UoM	Estimated
1	Contracted Quantum at ex-DIL	MW	171
2	No of Days	Nos.	366
3	Hours	Nos.	24

4	Normative Availability	%	85%
5	***Units at Normative Availability***	***MU***	***1277.54***
6	Forecasted Availability	%	85%
7	Estimated Utilisation	%	100%
8	Units at Ex-Bus (Forecast Schedule)	MU	1277.54
9	Inter-State Losses	%	3.75%
10	***Units at UP Periphery***	***MU***	***1229.63***
11	Intra-State Losses	%	3.27%
12	***Units at NPCL***	***MU***	***1189.42***
13	Fixed Cost	Rs. Cr.	220.63
14	Variable Cost	Rs. Cr.	315.68
15	Inter-State Trans. Charges	Rs. Cr.	79.09
16	Intra-State Trans. Charges	Rs. Cr.	29.32
17	**Total Cost**	**Rs. Cr.**	**644.72**

6.4.5 The Petitioner also submitted that the above cost has been projected assuming 100% utilisation of availability at 85% which may not be feasible at time considering the off-peak demand / holidays. In this regard, the following provisions of Generation Tariff Regulations and approved LTPPA may be taken in to consideration.

6.4.6 The Petitioner further submitted that Regulation-24(a) & 26(i) of UPERC Generation Tariff Regulations, 2019 provides methodology for payment of Fixed Charges under Long-term Power Purchase Agreement. The same is reproduced below: -

Quote

"24 Capacity (Fixed) Charge:

Provided full capacity charges shall be recoverable at target availability specified in these regulations

26. Norms of Operation for Thermal generating stations:

(i) Target Availability (NAPAF) for recovery of full Capacity (Fixed) charges

(a) All thermal power generating stations, except those covered under clause

(b) 85%.

Unquote

6.4.7 Thus, from the above, it may be seen that, Discom has to pay full fixed charges to the Genco if the generation plant has achieved NAPAF of 85% and above. The same is also in line with the term of the LTPPA with DIL duly approved by the Commission vide its Order dated April 20, 2016. Relevant extract of the LTPPA is reproduced here-in-below: -

Quote

Article 7.3.9 (a)

The recovery of full Fixed Charge (Capacity Charge) will be allowed at Target Availability as per UPERC Regulations. Recovery of Fixed Charge below the level of Target Availability shall be on pro rata basis.

Unquote

6.4.8 Thus, based on the above, the Petitioner has computed the Fixed Cost at the normative availability of 85%. The Petitioner further submitted that above-mentioned Fixed Charges and Energy Charges are also in line with the principles /methodology as approved in DIL's Tariff Order dated September 21, 2022. The Petitioner submitted that the tariffs approved by the Commission vide Order dated September 21, 2022 are ex-Bus DIL's plant and transmission charges and losses from DIL's plant to NPCL Bus i.e., Inter-state injection charges and losses, Inter-state withdrawal charges and losses, Intra-state transmission charges and losses are applicable over and above approved tariff along with coal escalation charges. Accordingly, the Petitioner has considered the Inter-state injection charges and losses, Inter-state withdrawal charges and losses, Intra-state transmission charges and losses as applicable over and above the approved tariff along with coal escalation charges for the purpose of estimation of power purchase cost for FY 2023-24 subject to true-up in subsequent years.

6.4.9 The Petitioner submitted that, the claim towards Additional Coal and Change in Law has not been included in the power purchase costs estimated for FY 2023-24 and the same would be claimed subsequently at the time of truing-up based on receipt of Bills from M/s DIL.

6.4.10 The Petitioner further submitted that, in addition to above, following petitions are also pending before Commission for disposal:

- Petition No. 1830/2022 for seeking approval of capital expenditure on account of installation of DE-NOx system as 'Change in Law' event
- Petition No. 1798/2021 for truing-up of the 'Change in Law' claims of FY 2020-21
- Petition No. 1794/2021 for Prudence Check and use of Additional Coal in FY 2020-21
- Petition No. 1651/2020 for approval of capital expenditure on account of installation of FGD system as 'Change in Law' event
- Petition for truing-up of the 'Change in Law' claims of FY 2021-22
- Petition for Prudence Check and use of Additional Coal in FY 2021-22

6.4.11 Any impact on the power purchase cost pursuant to the orders of the Commission in the above petitions would be consequently claimed by the Petitioner in the ARR / APR / Truing-up petitions as the case may be.

Medium Term Power Procurement

6.4.12 The Petitioner submitted that during FY 2020-21, based on the load profile, the Petitioner had tied-up following Medium Term Power through Competitive Bidding held on Deep Portal in accordance with the Guidelines of Central Government as below in Table: -

TABLE 6-10: MEDIUM TERM PPA'S DATED 30.12.2020 & 31.12.2020

Source	Capacity	Duration	Period	Composite Tariff at NPCL (Rs./kWh)	Nature
TPTCL (GoHP, H.P.)	45 MW	RTC	May-Sep	4.43*	Large Hydro
APPCPL (GEL, H.P.)	15 MW	RTC	May-Sep		
Note: Composite tariff of TPTCL (GoHP) comprises Cost of fixed and variable charges of Rs. 1.661 per kWh, Cost of Transmission Charges of Rs. 0.7978 per kWh and Cost of Transmission Losses of Rs. 0.31 per kWh while Composite tariff of APPCPL (GEL) comprises Cost of fixed and variable charges of Rs. 1.695 per kWh, Cost of Transmission Charges of Rs. 0.79 per kWh and Cost of Transmission losses of Rs. 0.25 per kWh. The Copy of the approval order is provided* ***in Annexure-6*					

6.4.13 The Petitioner submitted that tariff discovered through bidding is Rs. 4.43 /kWh landed at NPCL Bus based on then prevailing transmission charges and losses in terms of the bid documents. The tariff along with the PPA's dated December 30, 2020 and December 31, 2020 was duly approved by the Commission vide Order May 10, 2021. The Petitioner again submitted that the above tariff was based on the then prevailing transmission charges and losses and the same would subsequently be payable at actuals in accordance with Article 5.5 and 5.6 of the above approved PPA dated January 23, 2020. The relevant extract of the MTPPA is reproduced below:

Quote

5.5 Obligations relating to transmission charges

*The Supplier shall be liable for payment of all charges, due and payable under Applicable Laws, for inter-state and intra-state transmission of electricity from the Point of Grid Connection to the Delivery Point. For the avoidance of doubt, the Parties expressly agree that inter-state and intra-state transmission of electricity shall be undertaken solely at the risk and cost of the Supplier and all liabilities arising out of any failure of inter-state and intra-state transmission shall, subject to the provisions of Clause 11.4.4, be borne by the Supplier**. The Parties further agree that the obligation of the Supplier to pay the regulated charges for transmission of electricity shall be restricted to the tariffs and rates applicable on the Bid Date for and in respect of the Contracted Capacity and any differential arising from revision of the regulated tariffs and rates thereafter shall be payable or recoverable, as the case may be, by the Utility.***

5.6 Obligations relating to transmission losses

*5.6.1 The Supplier shall be liable for the transmission losses in all inter-state and intra- state transmission of electricity from the Point of Grid Connection to the Delivery Point. For the avoidance of doubt, the Parties expressly agree that transmission of electricity shall be undertaken solely at the risk and cost of the Supplier and all liabilities arising out of any transmission losses on inter-state and intra-state transmission lines shall be borne by the Supplier. **The Parties further agree that the obligation of the Supplier to bear the transmission losses shall be restricted to the level of losses determined by the Central Commission as on the Bid Date for this Project and any differential (higher or***

lower) arising from revision in the level of losses thereafter by the Central Commission shall be borne by the Utility.

Unquote

6.4.14 Accordingly, based on the applicable transmission charges and losses for Inter-State and Intra-State Transmission Utilities, during FY 2023-24, the Petitioner estimated to procure 186.06 MU power in aggregate from the above sources at average landed cost of Rs. 4.68/kWh as summarised below: -

TABLE 6-11: PROPOSED MEDIUM TERM POWER SUBMITTED BY PETITIONER FOR FY 2023-24

S. No.	Description	UoM	M/S TPTCL (Source- G.o.HP)	M/S APPCPL (Source- Goodwill, HP)
1	Contracted (May-Sep)	MW	45	15
2	Hours	-	24	24
3	No of Days	-	153	153
4	Forecasted Utilization of Available Capacity	%	85%	85%
5	Units at Ex-Bus	MU	149.88	49.96
6	Inter-State Losses	%	3.75%	3.75%
7	**Units at UP Periphery**	**MU**	**144.26**	**48.09**
8	Intra-State Losses	%	3.27%	3.27%
9	**Units at NPCL**	**MU**	**139.54**	**46.51**
10	Fixed Cost	Rs. Cr.	23.94	8.42
11	Energy Cost	Rs. Cr.	28.22	9.62
12	Inter-State Trans. Charges	Rs. Cr.	9.25	3.08
13	Intra-State Trans. Charges	Rs. Cr.	3.44	1.15
14	**Total Cost**	**Rs. Cr.**	**64.84**	**22.28**
15	**Landed Rate**	**Rs. kWh**	**4.65**	**4.79**

6.4.15 The Petitioner submitted that the above power purchase cost from Medium Term Agreements have been estimated based on applicable tariff, transmission charges and losses as per approved PPA. The Petitioner further submitted that the variance in approved power is uncontrollable in nature as the same has been incurred accordance with terms of approved PPA's. This is in line with Regulation 8.1 (d) of MYT Regulations, 2019 as reproduced below: -

Quote

8.1(d) Variation in the approved cost of power purchase from approved sources, subject to clauses in the power purchase agreement or arrangement approved by the Commission.

Unquote

6.4.16 The Petitioner submitted that the Commission, may refer to Medium Term Power Agreement for above sources which provide for Incentive and Damages as reproduced below: -

Quote

11.6 Incentive and Damages

11.6.1 In the event that the Availability in any month exceeds the Normative Availability, the Supplier shall, in lieu of a Fixed Charge, be entitled to an Incentive which shall be calculated and paid at the rate of 50 % (fifty per cent) of the Fixed Charge for Availability in excess of Normative Availability. Provided, however, that any Incentive hereunder shall be due and payable only to the extent of Despatch of the Power Station. For the avoidance of doubt and by way of illustration, in the event the Availability in any month shall exceed the Normative Availability by 3% (three per cent) of the Contracted Capacity but the Despatch during that month shall exceed 1% (one per cent) of the Contracted Capacity, the Incentive payable hereunder shall be restricted to such 1% (one per cent) only.

11.6.2 In the event that Availability in any month is less than the Normative Availability, the Fixed Charge for such month shall be reduced to the extent of shortfall in Normative Availability and in addition, any reduction below the Normative Availability shall be multiplied by a factor of 0.25 (zero point two five) to determine the Damages payable for such reduction in Availability. For the avoidance of doubt, the Parties agree that the Damages to be deducted for any reduction in Normative Availability shall be 25% (twenty five per cent) of the Fixed Charge which is reduced on account of shortfall in Availability below Normative availability.

11.6.3 The Parties expressly agree that within 30 (thirty) days of the close of every Accounting Year, the cumulative monthly Availability for such year shall be determined and the Incentive or Damages, as the case may be, shall be computed with reference to the Normative Availability for that year. The amount so arrived at shall be adjusted against the Incentives or Damages determined for the respective months of the year and the balance remaining shall be adjusted in the following Monthly Invoice."

Unquote

6.4.17 The Petitioner submitted that the full fixed charges are to be paid if the actual availability of the plant is more than Normative Availability of 85% and if the scheduled availability by the suppliers is more than 85% then supplier becomes eligible for incentives as per Article 11.6.1. Similarly, if the scheduled availability by the suppliers is less than 85% then the buyer is eligible to claim damage as per Article 11.6.2 of PPA. Further, as per Article 11.6.3 the claim for Incentive and Damages are adjusted after close of the accounting year, therefore, at present has not considered the Incentive / Damage in ARR for FY 2023-24 and would be considering the same in Truing up petition for FY 2023-24.

6.4.18 The Commission may be aware that the power demand of Greater Noida area is increasing exponentially owing to various initiatives taken by Central as well State Government. Further, the Commission may also be aware that two of our Medium Term PPAs with M/s APPCPL (Govt. of Arunachal Pradesh and Govt. of Nagaland) for purchase of 75 MW RTC hydro power during Apr-Sep and 50 MW hydro power for 4/2 Hours during Oct-Mar would be completing its term on March 31, 2023. The Petitioner submitted that it has planned to purchase following power on Medium Term (MT) basis along with some additional power through DEEP Portal in accordance with Competitive Bidding Guidelines of Central Government: -

i. 100 MW RTC Thermal power from Apr-Mar for 3 years commencing from April 01,2023 to meet the base load requirement

ii. 50 MW RTC Non-Solar Renewable and 50 MW RTC Hydro power from Apr-Sep and peak power during Oct-Mar for 3 years commencing from April 01,2023

6.4.19 The Petitioner submitted that while the bidding process for Non-Solar / Hydro power is underway, the reverse auction for thermal power has been conducted on November 24, 2022 and after reverse auction, the Petitioner has discovered L1 rate of Rs. 4.05 / kWh excluding inter-state & intra-state transmission charges and losses. Accordingly, the Petitioner will approach the Commission for adoption of above referred Tariff. The price discovered above for thermal power is considered as rates of thermal power while the weighted average rate of hydro power and non-solar renewable power has been considered as Rs. 5.50 / kWh wherein both rates are excluding inter-state and intra-state transmission charges & losses. The Petitioner submitted that based on above rates, the estimated tentative cost of the power proposed to be procured from above will be as follows: -

TABLE 6-12: PROPOSED MEDIUM-TERM POWER FOR FY 2023-24

Power	Units at NPCL (MU)	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Transmission Charges (Rs. Crore)	Total Cost at NPCL Bus	Landed Rate at NPCL Bus (Rs/kWh)
100 MW Thermal Power	695.14	151.19	151.19	63.36	365.75	5.26
50 MW Hydro Power	209.99	62.03	62.03	28.29	152.34	7.25
50 MW RE Non-Solar Power	173.79	51.33	51.33	15.84	118.50	6.82

6.4.20 The Petitioner has estimated to procure based on above rates, the estimated tentative cost of the power proposed to be procured from above will be as follows:-

TABLE 6-13: PROPOSED MEDIUM-TERM POWER FOR FY 2023-24

Supplier	Units at NPCL (MU)	Fixed Charges (Rs. Cr.)	Energy Charges (Rs. Cr.)	Total Transmission Charges (Rs. Cr.)	Total Cost at NPCL Bus	Landed Rate at NPCL Bus (Rs/kWh)
45 MW Hydro Power, TPTCL (GoHP, H.P.)	139.54	23.94	28.22	12.69	64.84	4.65
15 MW Hydro Power, APPCPL (GEL, H.P.)	46.51	8.42	9.62	4.23	22.28	4.79
100 MW Thermal Power	695.14	151.19	151.19	63.36	365.75	5.26
50 MW Hydro Power	209.99	62.03	62.03	28.29	152.34	7.25
Total	**1091.19**	**245.58**	**251.06**	**108.57**	**605.21**	**5.55**

Short Term Power Purchase Agreements

6.4.21 The Petitioner submitted that it has already tied-up majority of power requirement for FY 2022-23 through LTPPA and MTPPA as well as LT RE Power Purchase Agreements. Therefore, to manage its load curve, the Petitioner has not considered any Short-Term Arrangement for FY 2023-24 and keeping in view the directions of the Commission it is planned to procure entire remaining power requirement through Power Exchange. However, in case, any volatility is witnessed at IEX in subsequent months, the Petitioner may procure day and peak power through competitive bidding with prior approval of the Commission. Meanwhile for the purpose of estimation of Short-Term Power Purchase Cost for FY 2023-24, the Petitioner has estimated cost of procurement of 859.52 MU power at NPCL Bus from various ST Sources including Bidding / IEX. The Petitioner further submitted it has estimated cost of power to be procured from Power Exchange / DEEP Portal on the basis of average prices discovered at IEX during the recent period of Jul-Sep'22 as provided in table below: -

TABLE 6-14: SUMMARY OF POWER EXCHANGE RATES (Rs./kWh)

Type	Hours	Jul-22	Aug-22	Sep-22	Average
Peak	18-23 hrs	9.31	8.64	9.19	9.05
Night	00-04 & 23-24	6.04	4.85	5.43	5.44
Off peak	07-19 hrs	3.78	3.98	4.52	4.1
RTC	00-24 hrs	5.41	5.17	5.63	5.4

6.4.22 The estimated cost of the aforesaid short-term power sources is summarized below: -

TABLE 6-15: PROPOSED SHORT-TERM POWER FOR FY 2023-24

Supplier	Units at NPCL (MU)	Energy Charges (Rs. Crore)	Transmission Charges (Rs. Crore)	Total Cost at NPCL Bus	Landed Rate at NPCL Bus (Rs./kWh)
Inter State Power - from Trader / Generator-Peak	136.98	133.09	11.62	**144.71**	10.56
Inter State Power - from Trader / Generator-Night	97.57	56.99	8.31	**65.30**	6.69
Inter State Power - from Trader / Generator-Off Peak	189.65	83.42	16.02	**99.44**	5.24
Inter State Power - from Trader / Generator-RTC	329.53	191.22	27.78	**219.00**	6.65
Total	**753.73**	**464.72**	**63.73**	**528.45**	**7.01**

6.4.23 The Petitioner submitted that the variance in approved power is uncontrollable in nature as the same has been incurred accordance with terms of approved PPAs. This is in line with Regulation 8.1 (d) of MYT Regulations, 2019 as reproduced below

Quote

8.1(d) Variation in the approved cost of power purchase from approved sources, subject to clauses in the power purchase agreement or arrangement approved by the Commission.

Unquote

6.4.24 Further, the Petitioner vide E-mail dated 20.05.2023 submitted that in its Tariff Petition, the rate of untied power purchase from exchange is considered based on the rates prevailed during Jul-Sep'22. Since, the data for entire FY 2022-23 is available and therefore, requested the Commission to consider the rate for exchange as follows: -

TABLE 6-16: REVISED EXCHANGE PRICE SUBMITTED BY THE PETITIONER OF FY 2022-23

Financial Year	**N2 (Rs./MWh)**	**N2 (Rs./kWh)**
FY 2022-2023	5941.93	5.94
Summary	**N2 (Rs./MWh)**	**N2 (Rs./kWh)**
RTC	5941.93	5.94
Evening	7732.78	7.73
Day	4786.43	4.78
Night	5442.44	5.44
Morning	6151.92	6.15

Banking of Power

6.4.25 The Petitioner is also proposing to undertake banking of power with other Utilities during peak load season in order to avoid procurement of power at high market price. The return of the power taken under banking arrangement is proposed in winter season when it may have surplus power in certain time blocks. The Petitioner further submitted that the Commission is aware that banking is a cashless transaction therefore it has not considered any value for forward and return transaction of power banking and has only considered the transmission charges and losses involved in execution of the power banking transaction. The summary of proposed Banking of Power is provided in table below: -

TABLE 6-17: PROPOSED BANKING OF POWER FOR FY 2023-24

Supplier	**Units at NPCL**	**Energy Charges**	**Transmission Charges**	**Total**
	MU	**Rs. Crore**	**Rs. Crore**	**Rs. Crore**
Forward Banking	21.81	0.00	1.85	1.85
Return Banking	(22.90)	0.00	1.87	1.87
Total	**(1.09)**	**0.00**	**3.72**	**3.72**

Power Procurement from Renewable Sources

6.4.26 The Petitioner submitted that, it has executed following Renewable Power Purchase Agreements (PPA's) in order to meet Solar & Non-Solar RPO along with

HPO: -

i. Long Term Power Purchase Agreement for 1 MWp Solar power with Greater Noida Industrial Development Authority (GNIDA) as per the PPA approved by the Commission vide its order dated July 14, 2015. The Petitioner has projected the procurement of 1.58 MU at landed tariff of Rs. 7.06 per kWh at NPCL bus.

ii. Long Term Power Purchase Agreement for 10 MW Wind power with PTC India Limited signed on June, 27, 2017 and approved by the Commission vide its order dared January 5, 2018. The Petitioner has projected to procure 34.01 MU at landed tariff of Rs. 3.89 per kWh at NPCL bus.

iii. The Petitioner in order to meet its RPO obligation entered into an agreement on January 06, 2017 with M/s APPCPL for procurement of entire power generated from the Rooftop Solar Generating Plant of 370 +/-20% KWp at the Rooftops of the Appellant's 33/11 kV Substations located in Greater Noida. The Tariff agreed between the parties was based on the then discovered rate in UP State's tender for setting up of 500 MW Rooftop Solar PV Project by Solar Energy Corporation of India Ltd (SECI). Accordingly, the Petitioner vide its letter No. P-77A/ 249 dated October 27, 2016 submitted to the Commission that the installation of rooftop Solar PV projects on its various sub-stations / office buildings will also enable the Petitioner in executing its DSM Plan. Subsequently, the Petitioner vide letter No. P-77A/314 dated March 17, 2017 duly intimated the Commission after execution of the agreement as well as reiterated the same during various suo-moto proceedings held by the Commission for fulfilment of RPO Obligations by DISCOMs in UP. Copies of Letter dated October 27, 2016 and March 17, 2017 are annexed hereto and collectively marked as Annexure-2. Further, aforesaid power procurement was also duly approved by the Commission while approving the Business Plan vide its MYT Order dated November 30, 2017 and while approving ARR for FY 2018-19 and ARR for FY 2019-20 vide Tariff Orders dated January 22, 2019 and September 03, 2019 respectively. It was also approved while truing-up ARR for FY 2016-17, ARR for FY 2017-18 and ARR for FY 2018-19 vide Tariff Orders dated January 22, 2019, September 03, 2019 and December 04, 2020 respectively. Accordingly, it is estimated to procured 0.59 MU at Rs 5.49 per kWh rooftop solar plants set-up by M/s APPCPL at the Petitioner's establishments to help the Company in execution of DSM plan under intimation to UPERC vide company letter dated March 17, 2017.

iv. The Petitioner has also granted several connections under the net-metering policy approved by the Commission in its Roof-top Solar PV Regulation 2015. The Company would receive energy from such net metering consumers during FY 2023-24 but the same cannot be ascertained at present, therefore, the company will consider the same at the time of True-up for FY 2023-24.

v. Long Term Power Purchase Agreement for 25 MW Solar power each have been signed with M/s Tata Power and M/s Adani Energy which have been duly approved by the Commission vide its order dared September 18, 2019 and the Petitioner has estimated to procure long-term solar power of 52.70 MU at tariff of Rs. 3.20/ kWh from Tata power w.e.f November 27, 2021 and 53.80MU at tariff of Rs. 3.20/kwh from Adani Solar for FY 2023-24.

a) M/s Tata has filed Petition No. 1711/2021 before the Commission seeking additional cost due to Change in Law events. M/s Adani Solar has also filed similar Petition No. 1741/2021 seeking additional cost on account of Change in Law events. Appropriate modifications would be made in power purchase cost based on the directions of the Commission.

b) M/s Adani Solar has also filed a Petition No. 1753/2021 before the Commission seeking additional cost due to scheduling of power from January 06, 2021 to April 04, 2021. Appropriate modifications would be made in power purchase cost based on the directions of this Commission in the above matter.

vi. Medium Term Power Purchase Agreement for 50 MW RE Non-Solar has been proposed as described in section "Medium Term Power Purchase Sources" above, from which the Company has estimated to procure RE-Non Solar power of 173.79 MU @Rs. 6.82/ kWh during FY 2023-24.

vii. The Remaining Non-Solar Renewable Power purchase of 259.09 MUs is estimated to be procured from Power Exchange @ Rs. 7.18/kWh based on the rates discovered on IEX from Jul-Sep'22.

6.4.27 Based on above, the power procurement plan for FY 2023-24 from RE sources is given in the Table as below: -

TABLE 6-18: RENEWABLE POWER FOR FY 2023-24

Description	Projected		
	Units	Rs./kWh	Amount
Medium Term Power (Proposed Non-Solar)	173.79	6.82	118.50
Renewable Power (LT Wind Power)	34.01	3.90	13.25
Renewable Power (GNIDA LT Solar Power)	1.58	7.06	1.12
Renewable Power (Solar Power)- Adani Energy	53.80	3.20	17.23
Renewable Power (Solar Power)-Tata Power	52.70	3.20	16.88
Renewable Power (APPCPL LT Solar)	0.59	5.49	0.32
Subtotal	**316.47**	**5.29**	**167.31**
Power Exchange	259.09	7.18	186.13
Total	**575.56**	**6.14**	**353.44**

TABLE 6-19: RPO STATUS SUBMITTED BY PETITIONER FOR FY 2023-24 (MU)

RE Power	Opening Unfulfilled Obligation	Obligation for the year	Obligation met during the year*	Balance Obligation Carried Forward
	a	b	c	d=a+b-c
Solar	18.63	145.98	147.30	17.31
Non-Solar	(170.60)	204.37	293.10	(259.33)
Hydro Power	121.87	87.59	173.79	35.67
Total	**(30.10)**	**437.94**	**614.19**	**(206.35)**
** including gross generation under net-metering arrangements*				

6.4.28 The Petitioner submitted that the Commission in the Tariff Order dated July 20, 2022, while Truing up the ARR for FY 2020-21, has revised the methodology of computing RPO by considering the ex-bus energy purchased by it. The relevant extract of the order is provided below: -

Quote

Till, FY 2019-20, the Commission had been computing the RPO compliance considering the sales. The Commission is of the view that RPO compliance has to be computed on total consumption of energy at ex-bus and not on sales as done till FY 2019-20. Therefore, from FY 2020-21 onwards, the Commission deems it fit to revise methodology of computing RPO by considering the ex-bus energy purchased by NPCL. As the true-ups for the previous years' upto FY 2019-20 had already been carried out, the RPO compliance computed by the Commission for the period upto FY 2019-20 shall not be revised on account of the change in methodology.

Unquote

6.4.29 The Petitioner submitted that the aforesaid order, the Commission has changed the methodology of RPO computation of RPO from "consumption units" to "power purchase units" at ex-bus contrary to its own UPERC (Promotion of Green Energy through Renewable Purchase Obligation) Regulations, 2010 as amended from time to time., aggrieved by this, it has challenged the same by way of the Appeal No.398 of 2022, therefore, for the purpose of computation of RPO, it has not considered the methodology as adopted by the Commission in Tariff Order dated July 20, 2022 and computed the above shown RPO Status on the basis of methodology as followed by the Commission in its preceding Tariff Orders.

Sale of Power for Load Management and UI / DSM

6.4.30 The Petitioner submitted that it is highly uncertain or in-fact not feasible to exactly estimate the day-ahead power requirement as the demand is highly volatile, uncertain and dependent on a number of factors which are beyond the control of it e.g. volatile weather conditions, long intermittent holidays on account of various festivals, Govt. holidays etc. There can be certain time-blocks wherein the power tied-up may remain unutilised and thus, need to be sold on Power Exchanges. Therefore, it has estimated to sale of 7.73 MU power towards load management.

6.4.31 The Petitioner further submitted that it also requires to manage real time power surplus in accordance with the DSM Regulations for which it has estimated 11.60

MU to be settled DSM mechanism as per the prevailing regulations.

6.4.32 The Petitioner thus, estimated Sale of Power and Under-drawl through DSM aggregating to 19.91 MU power is approximately 0.54%% of the power purchase quantum and 0.20% of power purchase cost.

6.4.33 The Petitioner submitted that the MYT Regulations, 2019 also provides for power drawl under DSM mechanism. Regulation 14.7 of the MYT Regulations, 2019 states as follows:

Quote

14.7 In the regime of Availability Based Tariff (ABT), the cost of power purchase through Deviation Settlement Mechanism (DSM) shall be allowed to be passed through in Tariff of the subsequent year subject to the following condition:

(a) The Average rate for power purchased through DSM should not exceed the maximum rate for power purchased under the Merit order of the licensee as approved by the Commission.

(b) The total cost of Electricity units purchased through DSM shall be restricted to 10% of total power purchase cost approved by the Commission.

Unquote

6.4.34 The Petitioner submitted to approve the cost of power settled under DSM mechanism as shown in table below: -

TABLE 6-20: TOTAL POWER PURCHASE COST FOR FY 2023-24

Sl. No.	Source of Power Purchase	MU's	Rs. / kWh	Amount (Rs. Cr.)
1	Long Term –DIL	1,189.42	5.42	644.72
2	Medium Term	1,091.19	5.55	605.21
3	Short Term	753.73	7.01	528.45
4	Power Banking	(1.09)	-	3.72
5	Renewable Energy	575.56	6.14	353.44
6	Sale of Power	(7.73)	4.10	(3.17)
7	UI/DSM	(11.60)	1.00	(1.16)
8	**Total Power Purchase Cost**	**3,589.47**	**5.94**	**2,131.21**

6.4.35 The Petitioner submitted that it is receiving applications from consumers having contract demand > 1 MW seeking Open Access. Currently, 4 nos. of consumers having contract demand of 8.90 MW are taking long term power under Open Access while sixteen applications of contract demand 22.89 MW are under process. The migration of consumers to Open Access may impact the power purchase plan and the impact of the same will be submitted as per actuals during true-up.

Commission's Analysis

Power Purchase from Long Term Source

6.4.36 The Commission vide Order dated September 21, 2022 (MYT Petition No. 1531 of 2019 of DIL), has approved the generation tariff of Dhariwal Infrastructures Limited (DIL) for FY 2019-20 to FY 2023-24. The relevant extract of the aforesaid Order is quoted below:

Quote

TABLE 23: ARR and Generation Tariff for FY 2019-20 to FY 2023-24 approved by the Commission (Excluding the Cost of Additional Coal and Change in Law events)

Particulars	UoM	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Operationalized Contracted Capacity (Gross)	*MW*	*187*	*187*	*187*	*187*	*187*
Normative Auxiliary Power Consumption	*%*	*8.50.%*	*8.50.%*	*8.50.%*	*8.50.%*	*8.50.%*
Normative Annual Plant Availability Factor (NAPAF)	*%*	*85%*	*85%*	*85%*	*85%*	*85%*
Operationalized Contracted Capacity (Net)	*MW*	*171*	*171*	*171*	*171*	*171*
Ex-bus Generation	*Mus*	*1277.54*	*1274.05*	*1274.05*	*1274.05*	*1277.54*
………..						
Annual Fixed Charges for Operationalized Contracted Capacity for NPCL	*Crores*	*241.60*	*236.23*	*230.95*	*225.72*	*220.58*
Ex-bus Fixed Charge Rate at NAPAF	***Rs./kWh***	***1.891***	***1.854***	***1.813***	***1.772***	***1.727***
……….						
Ex-bus Energy Charge Rate at scheduled Generation	***Rs./kWh***	***2.471***	***2.471***	***2.471***	***2.471***	***2.471***
Total Ex-Bus Energy Charges	*Crores*	*315.68*	*314.82*	*314.82*	*314.82*	*315.68*
Application Fees & Statutory Charges	*Crores*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Total Annual Revenue Requirement for FY 2019- 24 for supply to NPCL	***Crores***	***557.27***	***551.05***	***545.77***	***540.54***	***536.26***
Ex-bus Generation Tariff for FY 2019-24 for supply to NPCL	***Rs./kWh***	***4.362***	***4.325***	***4.284***	***4.243***	***4.198***

Unquote

6.4.37 The Commission finds it appropriate to consider the rates of Fixed Charges (Ex-Bus) and Energy Charges (Ex-Bus) as determined by the Commission in the aforesaid Order for FY 2023-24. The Inter-State transmission charges are provisionally approved as claimed by the Petitioner, subject to prudence check, at the time of truing up. The Petitioner has claimed the Intra-State transmission charge in accordance to the Transmission Tariff Order of UPPTCL for FY 2022-23, whereas the Commission in Petition No. 1907 of 2022 had approved the transmission tariff of UPPTCL for FY 2023-24. Thus, the Commission has considered has considered the Intra-State Transmission charge of UPPTCL as approved for FY 2023-24. Taking into consideration, the above rates, the Commission has computed the following long term power purchase: -

TABLE 6-21-POWER PURCHASE FROM LONG TERM SOURCE (DIL) FOR FY 2023-24 COMPUTED BY THE COMMISSION (Rs. Crore)

Source	MU at Ex-bus	Inter State Loss (%)	Quantum at UP Periphery	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (Rs. Crs)	Energy Charges (Rs. Crs)	Amount (Rs. Crs)	Transmission charges of PGCIL (Rs. Crore)	Transmission Charges of UPPTCL (Rs. Crore)	Total Trans. Chgs (Rs. Crs)	Total (in Rs. Crore)	Per Unit Cost (Rs./ Unit)
DIL	1,277.54	3.75%	1,229.63	3.22%	1,190.04	220.58	315.68	536.26	79.09	31.43	110.52	646.78	5.43

6.4.38 The Commission has considered lower of the two values viz., claimed vs computed above for fixed charge and energy charge components of tariff for approval of procurement of power purchase from DIL for FY 2023-24 as shown below: -

TABLE 6-22: POWER PURCHASE FROM LONG TERM SOURCE APPROVED BY THE COMMISSION FOR FY 2023-24

Source	MU at Ex-bus	Inter State Loss (%)	Quantum at UP Periphery	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (Rs. Crs)	Energy Charges (Rs. Crs)	Amount (Rs. Crs)	Transmission charges of PGCIL (Rs. Crore)	Transmission Charges of UPPTCL (Rs. Crore)	Total Trans. Chgs (Rs. Crs)	Total (in Rs. Crore)	Per Unit Cost (Rs./ Unit)
DIL	1,277.54	3.75%	1,229.63	3.22%	1,190.04	220.58	315.68	536.26	79.09	31.43	110.52	646.78	5.43

6.4.39 The Commission for projection of quantum for FY 2023-24 has considered the same as projected by the Petitioner, and the Inter-State Transmission Loss as claimed by the Petitioner, subject to truing up based on actual. The Commission has considered Intra-State Transmission Loss as approved for UPPTCL for Tariff Order of FY 2023-24 in Petition No. 1907 of 2022.

TABLE 6-23: POWER PURCHASE FROM LONG TERM SOURCE SUBMITTED BY PETITIONER VS APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Source - DIL	UoM	Claimed	Computed	Approved
		(A)	(B)	(C)=lower of (A) & (B)
MU at Ex-Bus	MU	1277.54	1277.54	1277.54
Inter-State Loss	%	3.75%	3.75%	3.75%
Intra-State Loss	%	3.27%	3.22%	3.22%
MU at NPCL Bus	MU	1189.42	1190.04	1190.04
Fixed Charges	Rs. Crore	220.63	220.58	220.58
Energy Charges	Rs. Crore	315.68	315.68	315.68
Transmission Charges of PGCIL	Rs. Crore	79.09	79.09	79.09
Transmission Charges of UPPTCL	Rs. Crore	29.32	31.43*	31.43*
Total Cost	Rs. Crore	644.72	646.78	646.78
Per Unit Cost @ NPCL Bus	Rs. / kWh	5.42	5.43	5.43

***** *Intra-State Transmission Charges are higher than claimed value, because the Commission has revised the Intra-State Transmission Charges from Rs. 0.2465 /kWh for FY 2022-23 to Rs. 0.2641 /kWh for FY 2023-24. The Commission has considered the charges as per latest approved value.*

Power Purchase from Medium Term Source

6.4.40 The Commission vide its Order dated May 10, 2021 in Petition No. 1671 of 2021 approved the power procurement from Medium Term from two sources viz., 15 MW from Arunachal Pradesh Power Corporation Limited from Goodwill Energy, HP and 45 MW through Tata Power Trading Company Limited (TPTCL), from Govt. of Himachal Pradesh at rate of Rs. 4.43/kWh. The summary of the approval is tabulated below: -

Source		Goodwill Energy, Himachal Pradesh	Government of Himachal Pradesh
Quantum at NPCL Periphery		May 2021 – September 2021: 15 MW during 00:00-24:00 Hrs May-2022 - September 2022: 15 MW during 00:00-24:00 Hrs May-2023 - September 2023: 15 MW during 00:00-24:00 Hrs	May 2021 – September 2021: 45 MW during 00:00-24:00 Hrs May-2022 - September 2022: 45 MW during 00:00-24:00 Hrs May-2023 - September 2023: 45 MW during 00:00-24:00 Hrs
Cost of Generation (Rs./kWh)	A	1.695	1.6610
Cost of Transmission charges (Rs./kWh)	B	0.790	0.7978
Cost of Transmission Losses (Rs./kWh)	C	0.250	0.3100
Total Tariff at NPCL Bus (Rs./kWh)	D=(A*2)+B+C	4.43	4.43

6.4.41 The Commission has considered the tariffs from the above sources as approved vide the above said Order dated May 10, 2021. Since, there is no actual financial transaction related to transmission loss, therefore the Commission has considered the energy charge inclusive of transmission loss for the above said sources. The same will be subject to prudence check at the time of truing up based on the actuals. Based on the above, the power purchase computed from the above said medium source is as shown below: -

TABLE 6-24: MEDIUM TERM OF 15 MW COMPUTED FOR FY 2023-24 FROM GOODWILL ENERGY

Source	MU at Ex-bus	Inter State Loss (%)	Quantum at UP Periphery	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Amount (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL charges (Rs. Crore)	Total Transmission (Rs. Crore)	Total (Rs. Crore)	Per Unit Cost
Goodwill Energy, APPCL	49.93	3.75%	48.06	3.22%	46.51	7.88	9.05	16.93	2.45	1.23	3.67	20.61	4.43

TABLE 6-25: MEDIUM TERM OF 45 MW COMPUTED FOR FY 2023-24 FROM TATA POWER TRADING COMPANY LIMITED

Source	MU at Ex-bus	Inter State Loss (%)	Quantum at UP Periphery	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Amount (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL charges (Rs. Crore)	Total Transmission (Rs. Crore)	Total (Rs. Crore)	Per Unit Cost
TPTCL, Govt. of Himachal Pradesh	149.80	3.75%	144.18	3.22%	139.54	23.18	27.50	50.68	7.45	3.69	11.13	61.81	4.43

6.4.42 The Commission has considered the lower of the two values (i.e., the fixed charges, energy charges and transmission charge submitted by the Petitioner and computed by the Commission based on its Order dated May 10, 2021) for fixed charges, energy charges and transmission charge, and based on these values, the rate has been approved for FY 2023-24 as shown in the Table below:

TABLE 6-26: MEDIUM TERM OF 15 MW COMPUTED FOR FY 2023-24 FROM GOODWILL ENERGY

Source	MU at Ex-bus	Inter State Loss (%)	Quantum at UP Periphery	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Amount (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL charges (Rs. Crore)	Total Transmission (Rs. Crore)	Total (Rs. Crore)	Per Unit Cost
Goodwill Energy, APPCL	49.93	3.75%	48.06	3.22%	46.51	7.88	9.05	16.93	2.45	1.23	3.67	20.61	4.43

TABLE 6-27: MEDIUM TERM OF 45 MW COMPUTED FOR FY 2023-24 FROM TATA POWER TRADING COMPANY LIMITED

Source	MU at Ex-bus	Inter State Loss (%)	Quantum at UP Periphery	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Amount (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL charges (Rs. Crore)	Total Transmission (Rs. Crore)	Total (Rs. Crore)	Per Unit Cost
TPTCL, Govt. of Himachal Pradesh	149.80	3.75%	144.18	3.22%	139.54	23.18	27.50	50.68	7.45	3.69	11.13	61.81	4.43

6.4.43 The Commission for projection of quantum (MU) for FY 2023-24 has considered the same as projected by the Petitioner and the Inter-State Transmission Losses as claimed by the Petitioner, subject to truing up based on actual. Further, the Commission has considered Intra-State Transmission Loss as approved for UPPTCL for FY 2023-24. In regard to incentives and damages, in the previous orders, the Commission has made the following observation.

Quote

4.5.64 The Commission observed that the Petitioner is applying on short term basis whereas the source is approved on Medium Term. The flexibility to revise the schedule which is available in the Medium Term however, the same is not available in the short term. The Commission has taken the note that the Petitioner/ its Traders not applying for the appropriate mode of open access because of which the Commission is not in a position to ascertain the availability of the plant. Therefore, the Commission is not allowing any incentives for the above said Medium Term Source …

Unquote

Further, the Commission has taken the same view in this order, while truing up for FY 2021-22. Thus, in view of the approach taken by the Commission, the submission of incentives shall be considered only if medium term application is made and the availability of plant can be demonstrated.

TABLE 6-28: POWER PURCHASE FROM GOODWILL ENERGY, APPCL SUBMITTED BY PETITIONER VS APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Source – (Goodwill Energy, APPCL)	UoM	Claimed	Computed	Approved
		(A)	(B)	(C)=lower of (A) & (B)
MU at Ex-Bus	MU	49.93	49.93	49.93
Inter-State Loss	%	3.75%	3.75%	3.75%
Intra-State Loss	%	3.27%	3.22%	3.22%
MU at NPCL Bus	MU	46.51	46.51	46.51
Fixed Charges	Rs. Crore	8.42	7.88	7.88
Energy Charges	Rs. Crore	9.62	9.05	9.05
Transmission Charges of PGCIL	Rs. Crore	3.08	2.45	2.45
Transmission Charges of UPPTCL	Rs. Crore	1.15	1.23*	1.23*
Total Cost	Rs. Crore	22.28	20.61	20.61
Per Unit Cost @ NPCL Bus	Rs. / kWh	4.79	4.43	4.43

** Intra-State Transmission Charges are higher than claimed value, because the Commission has revised the Intra-State Transmission Charges from Rs. 0.2465 /kWh for FY 2022-23 to Rs. 0.2641 /kWh for FY 2023-24. The Commission has considered the charges as per latest approved value.*

TABLE 6-29: POWER PURCHASE FROM TPTCL - GOVT. OF HIMACHAL PRADESH SUBMITTED BY PETITIONER VS APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Source – (Govt. of H.P)	UoM	Claimed	Computed	Approved
		(A)	(B)	(C)=lower of (A) & (B)
MU at Ex-Bus	MU	149.88	149.80	149.80
Inter-State Loss	%	3.75%	3.75%	3.75%
Intra-State Loss	%	3.27%	3.22%	3.22%
MU at NPCL Bus	MU	139.54	139.54	139.54
Fixed Charges	Rs. Crore	23.94	23.18	23.18
Energy Charges	Rs. Crore	28.22	27.50	27.50
Transmission Charges of PGCIL	Rs. Crore	9.25	7.45	7.45
Transmission Charges of UPPTCL	Rs. Crore	3.44	3.69*	3.69*
Total Cost	Rs. Crore	64.84	61.81	61.81
Per Unit Cost @ NPCL Bus	Rs. / kWh	4.65	4.43	4.43

** Intra-State Transmission Charges are higher than claimed value, because the Commission has revised the Intra-State Transmission Charges from Rs. 0.2465 /kWh for FY 2022-23 to Rs. 0.2641 /kWh for FY 2023-24. The Commission has considered the charges as per latest approved value.*

6.4.44 In addition to above, the Petitioner also planned to purchase power through DEEP Portal in accordance with Competitive Bidding Guidelines of Central Government:

i. 100 MW RTC Thermal power from April-March for 3 years commencing from 01.04.2023 to meet the base load requirement

ii. 50 MW RTC Non-Solar Renewable and 50 MW RTC Hydro power from April-September and peak power during October-March for 3 years commencing from 01.04.2023

6.4.45 The Petitioner highlighting that out of above three Medium Term tenders, only one for thermal power has been finalized and the tariff has been adopted by the Commission vide order dated March 06, 2023 in Petition No. 1926 of 2022. Relevant extract of the above said Order is reproduced below: -

Quote

J) With reference to the Tariff discovered through Competitive bidding, transmission charges & losses are reflected as zero since the delivery point is considered at the CTU periphery i.e. Interconnection of Seller with CTU, therefore, the transmission charges and losses upto the delivery point i.e. CTU periphery is to be borne by the bidder and beyond delivery point i.e. withdrawal charges and losses of Northern Region and Transmission Charges & Losses of STU (i.e., UPPTCL) are payable by NPCL from the delivery point till NPCL-bus on actuals.

K) As per the provisions of the RFP, M/s Tata Power Trading Company Ltd. (Source: JITPL, Orissa) had been declared as "L1" for supply of 100 MW at quoted tariff of Rs. 4.05/kWh at delivery point. The details of the tariff quoted by M/s TPTCL is summarized below:

Source	***-***	***Jindal India Thermal Power Limited, Orissa***
Quantum at Delivery Point i.e., CTU Periphery of Seller		*01.04.2023 to 31.03.2026: 100 MW RTC*
Fixed Charges (Rs. /kWh)	*A*	*2.025*
Variable Charges (Rs. /kWh)	*B*	*2.025*
Cost of Transmission Charges (Rs. /kWh)	*C*	*0.000*
Cost of Transmission Losses (Rs. /kWh)	*D*	*0.000*
Total Tariff at Delivery Point (Rs/kWh)	*E=A+B+C+D*	*4.050*

Unquote

6.4.46 The Commission has considered the quantum (MU) and Inter-State Transmission Losses (%) same as projected by the Petitioner, subject to truing up based on actual. Further, the Commission has considered the Intra-State Transmission Loss as approved for UPPTCL for FY 2023-24.

TABLE 6-30: MEDIUM TERM OF 100 MW COMPUTED FOR FY 2023-24 FROM M/s TPTCL (Jindal India Thermal Power Limited)

Source	MU at Ex-bus	Inter State Loss (%)	Quantum at UP Periphery	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Amount (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL charges (Rs. Crore)	Total Transmission (Rs. Crore)	Total (Rs. Crore)	Per Unit Cost
TPTCL (JITPL)	746.64	3.75%	718.64	3.22%	695.50	151.19	151.19	302.39	46.22	18.37	64.59	366.98	5.28

6.4.47 The Commission has considered the lower of the two values (i.e., the fixed charges and energy charges submitted by the Petitioner and computed by the Commission based on its Order dated March 6, 2023) for fixed charges and energy charges, and based on these values, the rate has been approved for FY 2023-24 as shown in the Table below:

TABLE 6-31: MEDIUM TERM OF 100 MW APPROVED FOR FY 2023-24 FROM M/s TPTCL (Jindal India Thermal Power Limited)

Source	MU at Ex-bus	Inter State Loss (%)	Quantum at UP Periphery	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Amount (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL charges (Rs. Crore)	Total Transmission (Rs. Crore)	Total (Rs. Crore)	Per Unit Cost
TPTCL (JITPL)	746.64	3.75%	718.64	3.22%	695.50	151.19	151.19	302.39	46.22	18.37	64.59	366.98	5.28

TABLE 6-32: POWER PURCHASE FROM TPTCL - JITPL SUBMITTED BY PETITIONER VS APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Source – (Goodwill Energy, APPCL)	UoM	Claimed (A)	Computed (B)	Approved (C)=lower of (A) & (B)
MU at Ex-Bus	MU	746.64	746.64	746.64
Inter-State Loss	%	3.75%	3.75%	3.75%
Intra-State Loss	%	3.27%	3.22%	3.22%
MU at NPCL Bus	MU	695.14	695.50	695.50
Fixed Charges	Rs. Crore	151.19	151.19	151.19
Energy Charges	Rs. Crore	151.19	151.19	151.19
Transmission Charges of PGCIL	Rs. Crore	46.22	46.22	46.22
Transmission Charges of UPPTCL	Rs. Crore	17.14	18.37*	18.37*
Total Cost	Rs. Crore	365.75	366.98	366.98
Per Unit Cost @ NPCL Bus	Rs. / kWh	5.26	5.28	5.28

** Intra-State Transmission Charges are higher than claimed value, because the Commission has revised the Intra-State Transmission Charges from Rs. 0.2465 /kWh for FY 2022-23 to Rs. 0.2641 /kWh for FY 2023-24. The Commission has considered the charges as per latest approved value.*

6.4.48 In addition to above, the Petitioner has also proposed 225.55 MU from hydro from non-approved source. The Commission has not considered the same and such energy requirement, if any will be dealt while approving the power procurement from Renewable sources.

6.4.49 Accordingly, the medium-term power purchase approved by the Commission for FY 2023-24 is as under:

TABLE 6-33: MEDIUM TERM POWER PURCHASE APPROVED FOR FY 2023-24

Source	MU at Ex-bus	Inter State Loss (%)	Quantum at UP Periphery	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Amount (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL charges (Rs. Crore)	Total Transmission (Rs. Crore)	Total (Rs. Crore)	Per Unit Cost
Goodwill Energy, APPCL	49.93	3.75%	48.06	3.22%	46.51	7.88	9.05	16.93	2.45	1.23	3.67	20.61	4.43
TPTCL, Govt. of Himachal Pradesh	149.80	3.75%	144.18	3.22%	139.54	23.18	27.50	50.68	7.45	3.69	11.13	61.81	4.43
TPTCL (JITPL)	746.64	3.75%	718.64	3.22%	695.50	151.19	151.19	302.39	46.22	18.37	64.59	366.98	5.28

Power Purchase from Renewable Source

6.4.50 The Commission observed that the Petitioner proposed to procure renewable power from the sources mentioned below: -

- GNIDA-Solar
- Wind-PTC
- Adani-Solar
- Tata-Solar
- Non-Solar (GTAM)
- Medium Term (Proposed Non-Solar)
- APPCPL-Solar

6.4.51 The Commission vide Order dated July 14, 2015 in Petition No. 1012 of 2015 has approved tariff for NPCL to procure power from Solar Power (GNIDA) and consider the same. The relevant extracts of the above said order is reproduced below: -

Quote

8. the Commission approves the Power Purchase Agreement (PPA) for purchase of 1 MWp solar PV power for a period of 10 years commencing from 01.03.2015.

9. Regarding the tariff, the Commission considers the provisions made under schedule - I (E) of UPERC (Captive and Renewable Energy Generating Plants) Regulations, and therefore allows the tariff of Rs. 7.06/kWh.

10. For any further extension of PPA, the matter shall be brought to the Commission for its approval. However, in any case, the tariff for extended period shall not exceed present allowed rate of Rs. 7.06/kWh.

Unquote

6.4.52 In regard to wind power procurement from PTC, the Commission vide its Order dated January 23, 2018 approved the procurement of 10 MW wind power through PTC at the rate of Rs. 3.53/kWh including the trading margin of Rs. 0.07/kWh at NPCL Periphery (Petition No. 1228 of 2018) and the same is considered while approving the power procurement from PTC. The relevant excerpts of the Order are reproduced below: -

Quote

6. In the hearing the Petitioner informed that to meet their renewable purchase obligations, this is the most reasonable rate on which the company is proposing to purchase 10MW wind power. Further, in this case the interstate transmission charges and losses are also not to be paid, as per the Government of India directives.

7. The Commission does not find any objection in this proposal therefore the Commission adopts the tariff of Rs.3.53 per unit including a trading margin of Rs.0.07 per unit. The purchase will be strictly as per the Power Purchase Agreement approved by M/s SECIL.

Unquote

6.4.53 Further, the Commission vide Order dated September 18, 2019 in Petition No. 1479 of 2019 had approved tariff from M/s Tata Power and M/s Adani Energy (Mahoba Solar (UP) Pvt Ltd, Ahmedabad). The relevant excerpts of the Order are reproduced below: -

Quote

In view of all the submissions placed on record of the Commission, the commission adopts the tariffs as below:

S. No.	Name of Bidders	Allotted Project Capacity (MW)	Final Tariff after e-reverse auctioning (Tariff for 25 years) in Rs./kWh
-----			
9	TATA Power Renewable Energy Ltd Mumbai (PPA Signed with NPCL)	25	3.08
10	Mahoba Solar (UP) Pvt Ltd, Ahmedabad (PPA Signed with NPCL)	25	3.08

Unquote

6.4.54 The Commission has considered the above approved rates while approving the power procurement from M/s Tata Power and M/s Adani Energy (Mahoba Solar (UP) Pvt Ltd, Ahmedabad). Further, the Commission has considered the net metering (Solar power) units equivalent to that approved in true up for FY 2021-22, subject to prudence check at the time of truing up.

6.4.55 In addition to above, the Petitioner also proposed to purchase from IEX (G-Tam) Non-Solar, Medium Term (Proposed Non-Solar) and APPCPL-Solar.

6.4.56 The Commission observed that Petitioner has projected APPCPL-Solar, which is not approved by the Commission. Thus, the Commission has not allowed any purchase from APPCPL-Solar.

6.4.57 In addition to above, the Commission has computed the net renewable energy to be required by the Petitioner to meet his RPO obligation and considered the GTAM (Solar) and GTAM (Non-Solar) rate for FY 2022-23.

6.4.58 Accordingly, the Commission has computed the Solar, Non-Solar and Hydro cumulative surplus / shortfall in line with the obligation specified in UPERC (Promotion of Green Energy through Renewable Purchase Obligation) (First Amendment) Regulations, 2019 as shown in the Table below: -

TABLE 6-34: RPO COMPUTATION FOR FY 2023-24

S. No.	Particular	Reference	2023-24
			Quantum (MU)
1	Energy Consumption (Sales)	A	3,315.59
2	Distribution Loss (%)	I	7.63%
3	**Energy Consumption at Discom Periphery**	**B**	**3589.48**

S. No.	Particular	Reference	2023-24
			Quantum (MU)
4	Hydro Purchase during the year (Large Hydro excluding Hydro purchase considered under HPO i.e. before March 08, 2019)	C=C1+C2	199.84
4.1	Hydro Purchase from Inter-State Sources (MU)	C1	199.84
4.2	Hydro Purchase from Inter-State Sources (MW)	C1'	60.00
4.3	Hydro Purchase from Intra-State Sources (MU)	C2	-
4.4	Hydro Purchase from Intra-State Sources (MW)	C2'	-
4.5	Inter-State Transmission Loss (%)	D	3.75%
4.6	Hydro Purchased at State Periphery (MU)	E=C1*(1-D)	192.35
4.7	Intra-State Transmission Loss (%)	F	3.22%
4.8	Hydro Purchase at Distribution Periphery (MU)	G=(B2+D)*(1-F)	186.06
	Net Power Sale for RPO computation	**H=B-G**	**3,403.41**
5	Total Obligation for the year (%)		
5.1	Solar (%)	J	5%
5.2	Non Solar (%)	K	7%
5.3	HPO Obligation for the year (%)	L	3%
6	Total Obligation for year		
6.1	Solar (MU)	M=H*J	170.17
6.2	Non Solar (MU)	N=H*K	238.24
6.3	HPO Obligation for the year (MU)	O=H*L	102.10
7	**Total Obligation for the year(MU)**	**P=M+N+O**	**510.51**
	Total RPO Fulfilled during the year		
8	Solar Purchase (MU)	Q=Q1+Q2	111.68
8.1	Solar Purchase from Inter-State Sources (MU)	Q1	-
8.2	Solar Purchase from Inter-State Sources (MW)	Q1'	-
8.3	Solar Purchase from Intra-State Sources (MU)	Q2	111.68
8.4	Solar Purchase from Intra-State Sources (MW)	Q2'	-
8.5	Inter-State Transmission Loss (%)	C	3.75%
8.6	Solar Purchased at State Periphery (MU)	R=Q1*(1-C)	-
8.7	Intra-State Transmission Loss (%)	F	3.22%
8.8	Solar Generation (from Net Metering) (MU)		38.63
8.9	**Solar Purchase at Distribution Periphery (MU)**	**S=(Q2+R)*(1-F)**	**146.72**
9	Non Solar (MU)	T=T1+T2	35.16
9.1	Non Solar Purchase from Inter-State Sources (MU)	T1	35.16
9.2	Non Solar Purchase from Inter-State Sources (MW)	T1'	-
9.3	Non Solar Purchase from Intra-State Sources (MU)	T2	-
9.4	Non Solar Purchase from Intra-State Sources (MW)	T2'	-
9.5	Inter-State Transmission Loss (%)	C	3.75%
9.6	Non Solar Purchased at State Periphery (MU)	U=T1*(1-C)	33.84
9.7	Intra-State Transmission Loss (%)	F	3.22%
9.8	**Non Solar Purchase at Distribution Periphery (MU)**	**V=(T2+U)*(1-F)**	**32.75**
10	HPO (MU)	W=W1+W2	-
10.1	HPO from Inter-State Sources (MU)	W1	-
10.2	HPO from Inter-State Sources (MW)	W1'	-
10.3	HPO from Intra-State Sources (MU)	W2	-

S. No.	Particular	Reference	2023-24
			Quantum (MU)
10.4	HPO from Intra-State Sources (MW)	W2'	-
10.5	Inter-State Transmission Loss (%)	C	3.75%
10.6	HPO Purchased at State Periphery (MU)	X=W1*(1-C)	-
10.7	Intra-State Transmission Loss (%)	F	3.22%
10.8	HPO at Distribution Periphery (MU)	Y=(W2+X)*(1-F)	-
11	**Total RPO to be fulfilled**	**Z=S+V+Y**	**179.47**
12	**Balance Obligation to be fulfilled for the year**	**ZY=AA+AB+AC**	**331.04**
12.1	Solar (MU)	AA	23.45
12.2	Non Solar (MU)	AB	205.50
12.3	HPO Obligation for the year (MU)	AC	102.10

6.4.59 The Commission is of the view that the Petitioner should fulfill its RPO obligation for FY 2023-24. Accordingly, apart from the RPO obligation being met during the year by the Petitioner, the Commission has considered remaining shortfall of non-solar and solar RPO obligation through GTAM market. The Commission has computed the RPO details as under:

TABLE 6-35: STATUS OF RPO TO BE MET DURING FY 2023-24

RE Power	Opening Unfulfilled Obligation (FY 2022-23)	Obligation for the year	Obligation met during the year	Closing Unfulfilled Obligation (for FY 2022-23)	Additional Obligation considered from GTAM	Obligation Considered due to fungibility	Net Closing Obligation
Solar	91.28	170.17	146.72	114.73	114.73	0.00	0.00
Non-Solar	(104.28)	238.24	32.75	101.21	343.89	(242.68)	0.00
HPO	140.58	102.10	0.00	242.68	0.00	242.68	0.00
Total	**127.58**	**510.51**	**179.47**	**458.62**	**458.62**	**0.00**	**0.00**

6.4.60 Further, in regard to Inter-State Transmission charges, the Ministry of Power (MoP) vide its letter No. 23/12/2016-R&R-Part(1)[239444] dated June 21, 2021 waived the transmission charges till June 30, 2023. The relevant extract of the above said letter is reproduced below: -

Quote

d. Waiver of transmission charges shall be allowed for trading of electricity generated/ supplied from Solar, wind, PSP and BESS in Green Term Ahead Market (GTAM) and Green Day Ahead Market (GDAM) for two years ie till 30th June 2023. This arrangement will be reviewed on annual basis depending upon the future development in the power market.

3.0 It is also clarified that waiver is allowed for inter-state transmission charges only and not losses.

4.0 As per section 2 (36) of the Electricity Act, 2003,

"inter- State transmission system" means

(i) any system for the conveyance of electricity by means of main transmission line from the territory of one State to another State;

(ii) the conveyance of electricity across the territory of an intervening State as well as conveyance within the State which is incidental to such inter-State transmission of electricity;

(iii) the transmission of electricity within the territory of a State on system built, owned, operated, maintained or controlled by a Central Transmission- Utility;

Thus, an intra-State transmission system which is used for the conveyance of electricity across the territory of an intervening State as well as conveyance within the State which is incidental to such inter-State transmission of electricity, shall be included for sharing of inter- state transmission charges. Any waiver of inter-state transmission charges that applies to Inter-state transmission systems shall also be applicable to such parts of the Intrastate transmission. The transmission charges of such Intra-state transmission system shall be reimbursed by the CTU as is being done for ISTS system. Concerned Regional Power Committee may through studies identify such lines.

5.0 This order shall be applicable prospectively i.e. from the date of issue of order.

Unquote

6.4.61 In light of the above, the Commission has not allowed any Inter-State transmission charges for renewable power procurement through GTAM and GDAM market.

6.4.62 Further, the Commission has notified UPERC (Captive and Renewable Energy Generating Plants) Regulations, 2019 (CRE Regulations, 2019) which exempted the Intra-State Transmission charge for renewable source. The relevant extract is as below: -

Quote

26 Open Access

b) Renewable Energy based Generating Power Plant

V. *A Renewable Energy based Generating Power Plant shall have right to 'open access' for carrying electricity from its plant to the destination of its use by using transmission and / or distribution system or associated facilities with such lines or system and for that purpose, Rules, Regulations and Orders passed by the Appropriate Commission shall apply.*

VI. *The plant seeking 'Open Access' within or outside the State through the grid shall be regulated under Regulations specified by the Appropriate Commission.*

VII. *The plant or the consumer, seeking 'Open Access' to the State and / or Inter State Transmission Systems and / or distribution system for carrying the electricity generated by it to the destination of use, shall pay the transmission charges, wheeling charges and such other charges for use of such facilities as determined by the Appropriate Commission(s).*

Provided for large scale stand-alone solar projects set up for sale of power to electricity distribution Company or Third party or Captive use, there shall be exemption of 50% on Wheeling charges/ Transmission charges on Intrastate Sale of Power and 100% exemption on Intrastate Transmission system on Interstate sale of solar power. This exemption is as per the provisions provided in UP Solar Energy Policy, 2017.

VIII. *In case, the power generated from RE source based generating plant is supplied to a consumer, then such consumer shall pay charges as per the provisions of UPERC Open Access Regulations. Provided for large scale stand-alone solar projects set up for sale of power to Electricity distribution Company or Third party or Captive use, there shall be 100 % exemption from State cross subsidy surcharge for Interstate sale of solar power. This exemption is as per the provisions provided in UP Solar Energy Policy, 2017.*

Unquote

6.4.63 In light of the above Regulations, the Commission has considered the Intra-State transmission charge as 50% of the approved value for FY 2023-24 for solar consumption and 100% exemption of Inter-State transmission charge for solar power.

6.4.64 The Commission observed that Uttar Pradesh Power Transmission Corporation Limited (UPPTCL) billed the solar units @ 50% of approved transmission tariff. Further, in Deficiency Note UPPTCL is directed to clarify whether such rebate of 50% is irrespective of type of open access (LTA, MTA or STA). In its reply, UPPTCL submitted that considering the provisions of UP Solar Policy, UPPTCL is billing the transmitted energy quantum @ 50% of the approved transmission tariff, which is scheduled from intra-state solar generators for all type of access (LTOA/MTOA/STOA) of intra state transmission system.

6.4.65 The remaining power purchased from non-solar and solar power, considered to be fulfilled through GTAM market and GTAM Rates have been arrived at by consolidating the daily transactions from April 2022 to March 2023 (FY 2022-23). Further, inter-state losses have been considered as submitted by the Petitioner for short term purchase from exchange. For intra-state, the UPPTCL Transmission losses and charges as approved in the Tariff Order FY 2023-24 is considered for computing the cost at NPCL Periphery. The Power purchase from renewable sources approve for FY 2023-24 is as under:

TABLE 6-36: APPROVED RENEWABLE ENERGY FOR FY 2023-24

Source	MU at Ex-bus	Inter State Loss (%)	Quantum at UP Periphery	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Amount (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL charges (Rs. Crore)	Total (Rs. Crore)	Per Unit Cost
Wind-PTC	35.16	0.00%	35.16	3.22%	34.03	-	12.41	12.41	-	0.90	13.31	3.91
GNIDA-Solar	1.58	0.00%	1.58	0.00%	1.58	-	1.12	1.12	-	-	1.12	7.06
Adani-Solar	53.80	0.00%	53.80	0.00%	53.80	-	16.57	16.57	-	0.71	17.28	3.21
Tata-Solar	52.70	0.00%	52.70	0.00%	52.70	-	16.23	16.23	-	0.70	16.93	3.21
APPCPL-Solar	-	0.00%	-	0.00%	-	-	-	-	-	-	-	-
MT (Proposed Non-Solar)	-	0.00%	-	0.00%	-	-	-	-	-	-	-	-
Net Metering (Solar Power)	0.51	0.00%	0.51	0.00%	0.51	-	0.10	0.10	-	-	0.10	2.00
Non-Solar (IEX GTAM)	369.17	3.75%	355.33	3.22%	343.89	-	217.91	217.91	-	9.08	226.99	6.60
Solar (IEX GTAM)	123.17	3.75%	118.55	3.22%	114.73	-	63.68	63.68	-	1.52	65.19	5.68
Total	**636.10**	**2.90%**	**617.64**	**2.65%**	**601.25**	**-**	**328.02**	**328.02**	**-**	**12.90**	**340.92**	**5.67**

TABLE 6-37: POWER PURCHASE FROM PTC- WIND SUBMITTED BY PETITIONER VS APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Source – (PTC - WIND)	UoM	Claimed (A)	Computed (B)	Approved (C)=lower of (A) & (B)
MU at Ex-Bus	MU	35.16	35.16	35.16
Inter-State Loss	%	3.75%	3.75%	3.75%
Intra-State Loss	%	3.27%	3.22%	3.22%
MU at NPCL Bus	MU	34.01	34.03	34.03
Fixed Charges	Rs. Crore	-	-	-
Energy Charges	Rs. Crore	12.41	12.41	12.41
Transmission Charges of PGCIL	Rs. Crore	-	-	-
Transmission Charges of UPPTCL	Rs. Crore	0.84	0.90*	0.90*
Total Cost	Rs. Crore	13.25	13.31	13.31
Per Unit Cost @ NPCL Bus	Rs. / kWh	3.90	3.91	3.91

* *Intra-State Transmission Charges are higher than claimed value, because the Commission has revised the Intra-State Transmission Charges from Rs. 0.2465 /kWh for FY 2022-23 to Rs. 0.2641 /kWh for FY 2023-24. The Commission has considered the charges as per latest approved value.*

TABLE 6-38: POWER PURCHASE FROM GNIDA- SOLAR SUBMITTED BY PETITIONER VS APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Source – (GNIDA - SOLAR)	UoM	Claimed (A)	Computed (B)	Approved (C)=lower of (A) & (B)
MU at Ex-Bus	MU	1.58	1.58	1.58
Inter-State Loss	%	0%	0%	0%
Intra-State Loss	%	0%	0%	0%
MU at NPCL Bus	MU	1.58	1.58	1.58
Fixed Charges	Rs. Crore	-	-	-
Energy Charges	Rs. Crore	1.12	1.12	1.12
Transmission Charges of PGCIL	Rs. Crore	-	-	-
Transmission Charges of UPPTCL	Rs. Crore	-	-	-
Total Cost	Rs. Crore	1.12	1.12	1.12
Per Unit Cost @ NPCL Bus	Rs. / kWh	7.06	7.06	7.06

TABLE 6-39: POWER PURCHASE FROM ADANI- SOLAR SUBMITTED BY PETITIONER VS APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Source – (ADANI - SOLAR)	UoM	Claimed (A)	Computed (B)	Approved (C)=lower of (A) & (B)
MU at Ex-Bus	MU	53.80	53.80	53.80
Inter-State Loss	%	0%	0%	0%
Intra-State Loss	%	0%	0%	0%
MU at NPCL Bus	MU	53.80	53.80	53.80
Fixed Charges	Rs. Crore	-	-	-
Energy Charges	Rs. Crore	16.57	16.57	16.57

Source – (ADANI - SOLAR)	UoM	Claimed (A)	Computed (B)	Approved (C)=lower of (A) & (B)
Transmission Charges of PGCIL	Rs. Crore	-	-	-
Transmission Charges of UPPTCL	Rs. Crore	0.66	0.71*	0.71*
Total Cost	Rs. Crore	17.23	17.28	17.28
Per Unit Cost @ NPCL Bus	Rs. / kWh	3.20	3.21	3.21

* *Intra-State Transmission Charges are higher than claimed value, because the Commission has revised the Intra-State Transmission Charges from Rs. 0.2465 /kWh for FY 2022-23 to Rs. 0.2641 /kWh for FY 2023-24. The Commission has considered the charges as per latest approved value.*

TABLE 6-40: POWER PURCHASE FROM TATA- SOLAR SUBMITTED BY PETITIONER VS APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Source – (TATA - SOLAR)	UoM	Claimed (A)	Computed (B)	Approved (C)=lower of (A) & (B)
MU at Ex-Bus	MU	52.70	52.70	52.70
Inter-State Loss	%	0%	0%	0%
Intra-State Loss	%	0%	0%	0%
MU at NPCL Bus	MU	52.70	52.70	52.70
Fixed Charges	Rs. Crore	-	-	-
Energy Charges	Rs. Crore	16.23	16.23	16.23
Transmission Charges of PGCIL	Rs. Crore	-	-	-
Transmission Charges of UPPTCL	Rs. Crore	0.65	0.70*	0.70*
Total Cost	Rs. Crore	16.88	16.93	16.93
Per Unit Cost @ NPCL Bus	Rs. / kWh	3.20	3.21	3.21

* *Intra-State Transmission Charges are higher than claimed value, because the Commission has revised the Intra-State Transmission Charges from Rs. 0.2465 /kWh for FY 2022-23 to Rs. 0.2641 /kWh for FY 2023-24. The Commission has considered the charges as per latest approved value.*

Power Purchase from Short-Term Source

6.4.66 The Commission observed that the Petitioner has not considered any Short-Term Arrangement for FY 2023-24 and is planning to procure entire remaining power requirement through Power Exchange on day ahead or real time basis or through competitive bidding. Meanwhile for the purpose of estimation of Short-Term Power Purchase Cost for FY 2023-24, the Petitioner has estimated procurement of 809.57 MU power at NPCL Bus from various Short Term Sources including Bidding / IEX.

6.4.67 The Commission has considered the average prices for FY 2022-23 for the respective time slots as shown below: -

TABLE 6-41: EXCHANGE PRICE FOR FY 2022-23

Financial Year	N2 (Rs./MWh)	N2 (Rs./kWh)
FY 2022-2023	5941.93	5.94
Summary	**N2 (Rs./MWh)**	**N2 (Rs./kWh)**
RTC	5941.93	5.94
Evening	7732.78	7.73
Day	4786.43	4.78
Night	5442.44	5.44
Morning	6151.92	6.15

6.4.68 Based on the above, the short-term power procured from the sources is tabulated below:

TABLE 6-42: POWER PURCHASE FROM APPROVED SHORT TERM SOURCES APPROVED BY THE COMMISSION FOR FY 2023-24

Source	MU at Ex-bus	Inter State Loss (%)	Quantum at UP Periphery	Intra State Loss (%)	MU at NPCL bus	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	PGCIL Charges (Rs. Crore)	UPPTCL charges (Rs. Crore)	Total (Rs. Crore)	Per Unit Cost
Inter-State Power (Peak)	147.13	3.75%	141.61	3.22%	137.05	-	113.77	7.95	3.62	125.34	9.15
Inter-State Power (Night)	104.80	3.75%	100.87	3.22%	97.62	-	57.04	5.69	2.58	65.30	6.69
Inter-State Power (Off Peak)	203.70	3.75%	196.06	3.22%	189.75	-	97.43	10.96	5.01	113.41	5.98
Inter-State Power (RTC)	353.94	3.75%	340.67	3.22%	329.70	-	210.28	19.02	8.71	238.00	7.22
Deemed Power Purchase (RTC)	174.46	3.75%	167.92	3.22%	162.51	-	103.65	9.37	4.29	117.31	7.22
Subtotal	**984.03**	**3.75%**	**947.13**	**3.22%**	**916.63**	**-**	**582.16**	**52.99**	**24.21**	**659.36**	7.19

Banking of Power

6.4.69 The Commission in the past Tariff Order dated December 04, 2020 for ARR of FY 2020-21, Tariff Order dated August 26, 2021 for ARR of FY 2021-22 and Tariff Order dated July 20, 2022 has disallowed the banking of Power because prior approval for the same was not taken. The Commission is of the view that the Petitioner should plan its power procurement in more pragmatically and efficiently to avoid any requirement of banking of power. The Commission for the time being disallowed the Banking of Power.

Unscheduled Interchange (UI/DSM)

6.4.70 The Commission observed that the Petitioner for FY 2023-24 has claimed 11.60 MU at Rs. 1/kWh under DSM mechanism. The Commission has gone through the Petitioner’s submissions regarding the claim of UI/DSM charges. Despite repeated directions to not indulge in UI, the Petitioner has again projected UI / DSM for FY 2023-24. The Commission does not approve any projection of UI for FY 2023-24.

Sale of Power

6.4.71 The Commission observed that the Petitioner has estimated to sale 7.73 MU power towards load management in FY 2023-24. The Commission directs the Petitioner to plan its power procurement in more pragmatically and efficiently to avoid any requirement to sale it in future and disallows the sale of power claim by the Petitioner. Thus, the Commission does not allow any additional purchase of power over and above the energy requirement to cater the load of its license area.

6.4.72 The Commission while computing the Intra- State transmission charges for FY 2023-24 has considered the transmission tariff of Rs 0.2641 / kWh and transmission losses of 3.22% for FY 2023-24 as approved by the Commission vide Tariff Order of UPPTCL for FY 2023-24.

6.4.73 The Commission will carry out the detailed analysis of actual power purchase, inter and intra transmission loss & transmission charges at the time of truing up of FY 2023-24. Accordingly, the power purchase quantum and cost as approved by the Commission for FY 2023-24 and as projected by the Petitioner is shown below: -

TABLE 6-43: APPROVED POWER PURCHASE FOR FY 2023-24

Particulars	True Up Petition for FY 2023-24						Approved for FY 2023-24					
Sources of Power Purchase	Energy at NPCL bus	Avg. Power Purchase Cost (Ex Bus)	PP Cost (Excl. Transmission)	PGCIL Charges	UPPTCL Charges	Total Cost	Energy at NPCL bus	Avg. Power Purchase Cost (Ex Bus)	PP Cost (Excl. Transmission)	PGCIL Charges	UPPTCL Charges	Total Cost
	(MU)	(Rs. /kWh)	(Rs. Crore)	(Rs. Crore)	(Rs. Crore)	(Rs. Crore)	(MU)	(Rs. /kWh)	(Rs. Crore)	(Rs. Crore)	(Rs. Crore)	(Rs. Crore)
Long Term Power												
Dhariwal Infrastructure limited (DIL)	1189.42	4.20	536.31	79.90	29.32	644.72	1190.04	4.20	536.26	79.09	31.43	646.78
Subtotal	**1189.42**	**4.20**	**536.31**	**79.90**	**29.32**	**644.72**	**1190.04**	**4.20**	**536.26**	**79.09**	**31.43**	**646.78**
Medium Term Power												
TPTCL (Source-GoHP)	139.54	3.48	52.15	9.25	3.44	64.84	139.54	3.38	50.68	7.45	3.69	61.81
APPCPL (Source-Goodwill, HP)	46.51	3.61	18.05	3.08	1.15	22.28	46.51	3.39	16.93	2.45	1.23	20.61
TPTCL (Source-JITPL)	695.14	4.05	302.39	46.22	17.14	365.75	695.50	4.05	302.39	46.22	18.37	366.98
Medium Term (Proposed Hydro)	209.99	5.50	124.05	23.11	5.18	152.34	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal	**1,091.19**	**4.24**	**496.64**	**81.67**	**26.90**	**605.21**	**881.56**	**3.91**	**370.00**	**56.12**	**23.28**	**449.40**
Short Term Power (IEX / Competitive Bidding)												

Particulars	True Up Petition for FY 2023-24						Approved for FY 2023-24					
Sources of Power Purchase	Energy at NPCL bus	Avg. Power Purchase Cost (Ex Bus)	PP Cost (Excl. Transmission)	PGCIL Charges	UPPTCL Charges	Total Cost	Energy at NPCL bus	Avg. Power Purchase Cost (Ex Bus)	PP Cost (Excl. Transmission)	PGCIL Charges	UPPTCL Charges	Total Cost
	(MU)	(Rs. /kWh)	(Rs. Crore)	(Rs. Crore)	(Rs. Crore)	(Rs. Crore)	(MU)	(Rs. /kWh)	(Rs. Crore)	(Rs. Crore)	(Rs. Crore)	(Rs. Crore)
Inter-State Power (Peak)	136.98	7.73	113.77	7.95	3.67	125.39	137.05	7.73	113.77	7.95	3.62	125.34
Inter-State Power (Night)	97.573	5.44	57.04	5.69	2.63	65.35	97.62	5.44	57.04	5.69	2.58	65.30
Inter-State Power (Off Peak)	189.65	4.78	97.43	10.96	5.06	113.46	189.75	4.78	97.43	10.96	5.01	113.41
Inter-State Power (RTC)	329.53	5.94	210.28	19.02	8.77	238.06	329.70	5.94	210.28	19.02	8.71	238.00
Deemed Power Purchase from Exchange	0.00	0.00	0.00	0.00	0.00	0.00	162.51	5.94	103.65	9.37	4.29	117.31
Subtotal	**753.73**	**5.91**	**478.52**	**43.62**	**20.12**	**542.25**	**916.63**	**5.92**	**582.16**	**52.99**	**24.21**	**659.36**
Power Purchase from RE												
Wind-PTC	34.01	3.53	12.41	-	0.84	13.25	34.03	3.53	12.41	0.00	0.90	13.31
GNIDA-Solar	1.58	7.06	1.12	-	-	1.12	1.58	7.06	1.12	0.00	0.00	1.12
Adani-Solar	53.80	3.08	16.57	-	0.66	17.23	53.80	3.08	16.57	0.00	0.71	17.28
Tata-Solar	52.70	3.08	16.23	-	0.65	16.88	52.70	3.08	16.23	0.00	0.70	16.93
APPCPL-Solar	0.59	5.49	0.32	-	-	0.32	0.00	0.00	0.00	0.00	0.00	0.00
Net Metering (Solar Power)	0.00	0.00	0.00	-	-	0.00	0.51	2.00	0.10	0.00	0.00	0.10
Non-Solar (IEX GTAM)	259.09	5.90	164.26	14.97	6.90	186.13	343.89	5.90	217.91	0.00	9.08	226.99
Solar (IEX GTAM)	0.00	0.00	0.00	-	-	0.00	114.73	5.17	63.68	0.00	1.52	65.19
Medium Term (Proposed Non-Solar)	173.79	5.50	102.66	11.56	4.28	118.50	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal	**575.56**	**5.15**	**313.58**	**26.52**	**13.34**	**353.44**	**601.25**	**5.16**	**328.02**	**0.00**	**12.90**	**340.92**
Power Banking / Sale of Power												
Forward Banking	21.81	0.00	0.00	1.27	0.58	1.85	0.00	0.00	0.00	0.00	0.00	0.00
Return Banking	-22.90	0.00	0.00	1.28	0.59	1.87	0.00	0.00	0.00	0.00	0.00	0.00
Sale of Power	-7.73	4.10	-3.17	0.00	0.00	-3.17	0.00	0.00	0.00	0.00	0.00	0.00
UI / DSM / Sale of Power	-11.60	1.00	-1.16	0.00	0.00	-1.16	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal	**(20.42)**	**2.12**	**(4.33)**	**2.55**	**1.17**	**-0.61**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Grant Total	**3589.47**	**4.73**	**1820.72**	**233.45**	**90.85**	**2145.01**	**3589.47**	**4.73**	**1816.45**	**188.20**	**91.82**	**2096.47**

** Intra-State Transmission Charges are higher than claimed value, because the Commission has revised the Intra-State Transmission Charges from Rs. 0.2465 /kWh for FY 2022-23 to Rs. 0.2641 /kWh for FY 2023-24. The Commission has considered the charges as per latest approved value.*

6.4.74 The Commission approved the month wise power purchase cost for FY 2023-24 as under: -

TABLE 6-44: APPROPRIATION OF APPROVED POWER PURCHASE FOR FY 2023-24

Months	Sales	Power Purchase (Over-All)						
	MUs	**Type**	**MU at Ex-Bus**	**MU at NPCL**	**FC**	**VC**	**Others**	**Total**
April	303.83	Long Term	118.26	110.16	20.42	29.22	10.23	59.87
		Medium Term	74.13	69.05	14.28	14.71	6.22	35.20
		Short Term	87.61	81.61	-	51.83	6.87	58.70
		RE-Solar (A)	19.00	18.31	-	8.01	0.24	8.25
		RE-Non-Solar (B)	53.27	49.79	-	30.34	1.31	31.66
		RE (A+B)	72.26	68.09	-	38.35	1.55	39.90
		Total	**352.26**	**328.93**	**34.69**	**134.11**	**24.88**	**193.68**
May	326.40	Long Term	136.34	127.00	23.54	33.69	11.79	69.02
		Medium Term	109.29	101.81	21.05	21.68	9.17	51.90
		Short Term	58.12	54.14	-	34.38	4.56	38.94
		RE-Solar (A)	19.63	18.92	-	8.28	0.25	8.52
		RE-Non-Solar (B)	55.04	51.45	-	31.35	1.36	32.71
		RE (A+B)	74.67	70.36	-	39.63	1.61	41.23
		Total	**378.42**	**353.36**	**44.59**	**129.38**	**27.13**	**201.10**
June	338.78	Long Term	122.51	114.12	21.15	30.27	10.60	62.02
		Medium Term	105.77	98.52	20.37	20.98	8.87	50.22
		Short Term	92.25	85.93	-	54.57	7.24	61.81
		RE-Solar (A)	19.00	18.31	-	8.01	0.24	8.25
		RE-Non-Solar (B)	53.27	49.79	-	30.34	1.31	31.66
		RE (A+B)	72.26	68.09	-	38.35	1.55	39.90
		Total	**392.78**	**366.77**	**41.52**	**144.18**	**28.26**	**213.96**
July	332.03	Long Term	128.40	119.61	22.17	31.73	11.11	65.01
		Medium Term	109.29	101.81	21.05	21.68	9.17	51.90
		Short Term	72.58	67.61	-	42.94	5.69	48.63
		RE-Solar (A)	19.63	18.92	-	8.28	0.25	8.52
		RE-Non-Solar (B)	55.04	51.45	-	31.35	1.36	32.71
		RE (A+B)	74.67	70.36	-	39.63	1.61	41.23
		Total	**384.95**	**359.45**	**43.22**	**135.98**	**27.58**	**206.77**
August	318.00	Long Term	129.31	120.45	22.33	31.95	11.19	65.46
		Medium Term	109.29	101.81	21.05	21.68	9.17	51.90
		Short Term	55.41	51.62	-	32.78	4.35	37.13
		RE-Solar (A)	19.63	18.92	-	8.28	0.25	8.52
		RE-Non-Solar (B)	55.04	51.45	-	31.35	1.36	32.71
		RE (A+B)	74.67	70.36	-	39.63	1.61	41.23
		Total	**368.68**	**344.27**	**43.37**	**126.04**	**26.31**	**195.73**
September	305.68	Long Term	125.64	117.04	21.69	31.05	10.87	63.61
		Medium Term	105.77	98.52	20.37	20.98	8.87	50.22
		Short Term	56.55	52.68	-	33.46	4.44	37.89
		RE-Solar (A)	19.00	18.31	-	8.01	0.24	8.25
		RE-Non-Solar (B)	47.45	44.35	-	27.03	1.17	28.20
		RE (A+B)	66.44	62.65	-	35.03	1.41	36.44
		Total	**354.41**	**330.93**	**42.06**	**120.52**	**25.59**	**188.17**
October	267.78	Long Term	93.08	86.70	16.07	23.00	8.05	47.12
		Medium Term	56.38	52.52	10.86	11.19	4.73	26.77
		Short Term	126.93	118.24	-	75.10	9.96	85.05
		RE-Solar (A)	19.63	18.92	-	8.28	0.25	8.52
		RE-Non-Solar (B)	14.44	13.50	-	8.22	0.36	8.58
		RE (A+B)	34.07	32.41	-	16.50	0.60	17.10
		Total	**310.46**	**289.90**	**26.93**	**125.78**	**23.34**	**176.05**

Months	Sales	Power Purchase (Over-All)						
November	189.02	Long Term	35.18	32.77	6.07	8.69	3.04	17.81
		Medium Term	54.56	50.83	10.51	10.82	4.58	25.91
		Short Term	96.44	89.83	-	57.05	7.57	64.62
		RE-Solar (A)	19.00	18.31	-	8.01	0.24	8.25
		RE-Non-Solar (B)	13.97	13.06	-	7.96	0.34	8.30
		RE (A+B)	32.97	31.37	-	15.97	0.58	16.55
		Total	**219.15**	**204.63**	**16.58**	**92.54**	**15.77**	**124.89**
December	223.02	Long Term	102.92	95.87	17.77	25.43	8.90	52.10
		Medium Term	56.38	52.52	10.86	11.19	4.73	26.77
		Short Term	65.19	60.73	-	38.57	5.11	43.68
		RE-Solar (A)	19.63	18.92	-	8.28	0.25	8.52
		RE-Non-Solar (B)	14.44	13.50	-	8.22	0.36	8.58
		RE (A+B)	34.07	32.41	-	16.50	0.60	17.10
		Total	**258.56**	**241.44**	**28.63**	**91.69**	**19.35**	**139.67**
January	243.70	Long Term	95.78	89.22	16.54	23.67	8.29	48.49
		Medium Term	56.38	52.52	10.86	11.19	4.73	26.77
		Short Term	96.31	89.72	-	56.98	7.56	64.54
		RE-Solar (A)	19.63	18.92	-	8.28	0.25	8.52
		RE-Non-Solar (B)	14.44	13.50	-	8.22	0.36	8.58
		RE (A+B)	34.07	32.41	-	16.50	0.60	17.10
		Total	**282.54**	**263.83**	**27.40**	**108.33**	**21.18**	**156.90**
February	217.84	Long Term	93.59	87.18	16.16	23.13	8.10	47.38
		Medium Term	52.75	49.13	10.16	10.46	4.43	25.05
		Short Term	74.35	69.26	-	43.99	5.83	49.82
		RE-Solar (A)	18.36	17.70	-	7.74	0.23	7.97
		RE-Non-Solar (B)	13.51	12.62	-	7.69	0.33	8.03
		RE (A+B)	31.87	30.32	-	15.44	0.56	16.00
		Total	**252.55**	**235.83**	**26.32**	**93.01**	**18.92**	**138.25**
March	249.52	Long Term	96.54	89.93	16.67	23.86	8.35	48.88
		Medium Term	56.38	52.52	10.86	11.19	4.73	26.77
		Short Term	102.29	95.28	-	60.52	8.02	68.54
		RE-Solar (A)	19.63	18.92	-	8.28	0.25	8.52
		RE-Non-Solar (B)	14.44	13.50	-	8.22	0.36	8.58
		RE (A+B)	34.07	32.41	-	16.50	0.60	17.10
		Total	**289.28**	**270.13**	**27.53**	**112.06**	**21.71**	**161.30**
Total	**3,315.59**	**Long Term**	**1,277.54**	**1,190.04**	**220.58**	**315.68**	**110.52**	**646.78**
		Medium Term	**946.38**	**881.56**	**182.26**	**187.75**	**79.40**	**449.40**
		Short Term	**984.03**	**916.63**	**-**	**582.16**	**77.20**	**659.36**
		RE-Solar (A)	**231.76**	**223.33**	**-**	**97.70**	**2.92**	**100.62**
		RE-Non-Solar (B)	**404.34**	**377.92**	**-**	**230.32**	**9.98**	**240.30**
		RE (A+B)	**636.10**	**601.25**	**-**	**328.02**	**12.90**	**340.92**
		Total	**3,844.04**	**3,589.47**	**402.84**	**1,413.61**	**280.02**	**2,096.47**

6.5 O&M EXPENSES

Petitioner's Submission

6.5.1 The Petitioner submitted that the Commission while approving the O&M Expenses in ARR for FY 2022-23 in its Tariff Order dated July 20, 2022 computed the normative O&M expenses for base year on the basis of trued-up O&M expenses of FY 2015-16 to FY 2019-20, had made inadvertent arithmetical errors while computing normative O&M Expenses which are as follows: -

i. Error in computation of Employee Expenses based on net trued-up Employee Expenses for FY 2015-16 & FY 2016-17 i.e. after deduction of employee expenses capitalized instead of gross trued-up employee expenses;

ii. Error in computation of A&G Expenses based on trued-up expenses of A&G Expenses for FY 2015-16 to FY 2019-20 without considering the following: -

   a) Expenses incurred for compliance of the directives of the State Commission;
   b) Impact of Service Tax;
   c) Impact of Goods & Service Tax and
   d) Cost of Borrowing of DPS.

6.5.2 The Petitioner further submitted that while truing up for FY 2018-19 and FY 2019-20 vide the Tariff Orders dated December 04, 2020 and August 26, 2021 respectively, the Commission had disallowed the amount claimed by the Petitioner towards impact of GST and Borrowing Cost for DPS. Aggrieved by the above disallowance, the Petitioner has challenged the same before the Hon'ble APTEL in Appeal No. 98 of 2021 and Appeal No.343 of 2021 respectively (since remanded back vide judgement dated 24.11.2022). The Petitioner therefore neutralized the impact of abovementioned errors in computation and has taken into consideration the amount claimed by it towards Impact of GST and Borrowing Cost for DPS for FY 2018-19 and FY 2019-20 for the purpose of computation of Normative O&M Expenses of Base Year (FY 2019-20), pending outcome of the above appeals. Thus, based on above discussion and methodology as provided in Regulation 45 (a) to (e) of MYT Regulations, 2019, the average of trued up values of O&M Expenses including additional O&M expenses, during last five (5) financial years i.e. FY 2015-16 to FY 2019-20 for determining values of employee costs, A&G Expenses and R&M Expenses for middle year i.e. FY 2017-18 is provided in below Table: -

TABLE 6-45: NORMATIVE O&M EXPENSES (Rs. Crore)

Sl. No	Particulars	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Average Normative (FY 17-18)
1	Employee Expenses	18.20	22.31	26.38	29.62	35.92	**26.49**
2	R&M Expenses	26.76	32.80	38.78	43.29	48.22	**37.97**
3	A&G Expenses	7.97	9.76	11.54	12.32	13.43	**11.00**
4	**Subtotal**	**52.92**	**64.88**	**76.70**	**85.23**	**97.57**	**75.46**
5	Finance Charges	3.07	1.71	1.64	1.58	1.74	**1.95**
6	S. Tax / GST	1.41	2.05	2.22	3.56	4.01	**2.65**
7	Finance Cost of DPS	1.44	3.02	3.33	3.28	2.85	**2.78**
8	**Subtotal**	**5.92**	**6.78**	**7.19**	**8.42**	**8.61**	**7.38**
9	**Total O&M Expenses**	**58.84**	**71.66**	**83.89**	**93.65**	**106.18**	**82.84**

6.5.3 Further in line with the norms mentioned in Regulation 45 (c), the values of each component of O&M expenses arrived of the middle year (i.e. FY 2017-18) values is further escalated to determine the normative expenses till Base Year i.e. FY 2019-20 as shown below: -

TABLE 6-46: COMPUTATION OF NORMATIVE O&M EXPENSES FOR BASE YEAR (Rs. Crore)

Sl. No	Particulars	Ref.	Emp. Exp.	A&G Exp.	R & M Exp.	O&M Exp.
1	**Normative Expense (FY 17-18)**	**A**	**26.49**	**18.39**	**37.97**	**82.84**
2	Escalation Factor (FY 18-19)	B	5.20%	5.20%	5.20%	-
3	**Normative Expense (FY 18-19)**	**c=a x (1 + b)**	**27.86**	**19.35**	**39.95**	**87.15**
4	Escalation Factor (FY 19-20)	D	6.30%	6.30%	6.30%	-
5	**Normative Expense (FY 19-20)**	**e=c x (1 + d)**	**29.62**	**20.56**	**42.46**	**92.64**

6.5.4 Based on the above determined normative O&M Expenses for Base Year i.e. FY 2019-20, computation of normative O&M Expenses for FY 2023-24 is as follows:

Normative Employee Expenses: -

Regulation 45.1 of the MYT Regulations, 2019 provides for determination of normative employee expenses, as reproduced below:

Quote

Employee cost shall be computed as per the following formula escalated by *consumer price index (CPI), adjusted by the provisions for expenses beyond the control of the licensee and one-time expected expenses, such as recovery/adjustment of terminal benefits, implications of pay commission, arrears, Interim Relief, etc.:*

$\boldsymbol{EMP_N = EMP_{N-1} \times (1+CPI\ inflation)}$

Where:

$\boldsymbol{EMP_N}$*: Employee expense for the* n^{th} *year;*

$\boldsymbol{EMP_{N-1}}$*: Employee expense for the* $(n-1)^{th}$ *year;*

CPI inflation is the average of the Consumer price Index (CPI) for Immediately preceding three financial years

Unquote

Accordingly, based on above Regulation, the normative employee expenses for FY 2023-24 works out as shown in following Table: -

TABLE 6-47: EMPLOYEE EXPENSES (NORMATIVE) FOR FY 2023-24 (Rs. Crore)

Particulars	Emp. Exp. for Base Year (FY 2019-20)	CPI Inflation	Emp. Exp. for (FY 2020-21)	CPI Inflation	Emp. Exp. for Ensuing Year (FY 2021-22)	Emp. Exp. for Ensuing Year (FY 2022-23)	Emp. Exp. for Ensuing Year (FY 2023-24)
	a	B	c=a x (1+b)	d	e=c x (1+d)	f=e x (1+d)	g=f x (1+d)
Normative Employee Cost	29.62	5.35%	31.20	5.89%	33.04	34.99	37.05

Administrative & General Expenses

Regulation 45.3 of MYT Regulations, 2019 provides the methodology for determination of normative A&G expenses, as shown below:

Quote

A&G expense shall be computed as per the following formula escalated by the Wholesale Price Index (WPI) and adjusted by provisions for confirmed initiatives (IT, etc., initiatives as proposed by the Transmission Licensee and validated by the Commission) or other expected one-time expenses:

A&Gn= A&G n-1 (1+ WPI inflation)

Where:

A&Gn: A&G expense for the nth year;

A&Gn-1: A&G expense for the (n-1)th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years:

Unquote

Accordingly, considering the norms as mentioned above, the normative A&G expenses for FY 2023-24 works out as shown below: -

TABLE 6-48: A&G EXPENSES (NORMATIVE) FOR FY 2023-24 (Rs. Crore)

Particulars	A&G Exp. for Base Year (FY 2019-20)	WPI Inflation	A&G Exp. for (FY 2020-21)	WPI Inflation	A&G Exp. for Ensuing Year (FY 2021-22)	A&G Exp. for Ensuing Year (FY 2022-23)	A&G Exp. for Ensuing Year (FY 2023-24)
	A	B	c=a x (1+b)	d	e=c x (1+d)	f=e x (1+d)	g=f x (1+d)
Normative A&G Expenses	20.56	2.96%	21.17	5.32%	22.30	23.49	24.74

Repair and Maintenance Expense

Regulation 45.2 provides the methodology for determining normative Repair and Maintenance expenses as shown below: -

Quote

Repair and Maintenance expense shall be calculated as per the following formula:

R&Mn= R&M n-1 (1+ WPI inflation)

Where:

R&Mn: Repairs & Maintenance expense for nth year;

R&Mn-1: Repairs & Maintenance expense for the (n-1)th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years.

Unquote

Accordingly, considering the norms as mentioned above, the normative R&M expenses for FY 2023-24 works out as shown below: -

TABLE 6-49: R&M EXPENSES AS SUBMITTED BY THE PETITIONER FOR FY 2023-24 (Rs. Crore)

Particulars	R&M Exp. for Base Year (FY 2019-20)	WPI Inflation	R&M Exp. for (FY 2020-21)	WPI Inflation	R&M Exp. for Ensuing Year (FY 2021-22)	R&M Exp. for Ensuing Year (FY 2022-23)	R&M Exp. for Ensuing Year (FY 2023-24)
	A	B	c=a x (1+b)	D	e=c x (1+d)	f=e x (1+d)	g=f x (1+d)
Normative R&M Expenses	42.46	2.96%	3.72	5.32%	46.04	48.49	51.08

6.5.5 The summary of normative O&M Expenses as computed on the basis of methodology provided in Regulation 45 of MYT Regulations, 2019 as compared to preceding years is provided in Table below: -

TABLE 6-50: SUMMARY OF O&M EXPENSES AS SUBMITTED BY THE PETITIONER (Rs. Crore)

Sl. No.	Financial Year	Nature	Employee Expenses	A&G Expense	R & M Expense	Gross O&M Expense
As per Distribution Tariff Regulations, 2006 and MYT Regulation, 2014						
1	FY 2015-16	Trued-up	18.2	13.89	26.76	**58.84**
2	FY 2016-17	Trued-up	22.31	16.55	32.8	**71.66**
3	FY 2017-18	Trued-up	26.38	18.73	38.78	**83.89**
4	FY 2018-19	Claimed Normative	29.62	20.74	43.29	**93.65**
5	FY 2019-20	Claimed Normative	35.92	22.04	48.22	**106.18**
As per MYT Regulations, 2019						
6	FY 2017-18	Normative	26.49	18.39	37.97	**82.84**
7	FY 2018-19	Normative	27.86	19.35	39.95	**87.15**
8	FY 2019-20	Normative	29.62	20.56	42.46	**92.64**
9	FY 2020-21	Normative	31.20	21.17	43.72	**96.09**
10	FY 2021-22	Normative	33.04	22.30	46.04	**101.39**
11	FY 2022-23	Normative	34.99	23.48	48.49	**106.97**
12	FY 2023-24	Normative	37.05	24.73	51.08	**112.86**

6.5.6 It can be observe from the above table that normative O&M expenses as per MYT Regulations, 2014 for FY 2019-20 was Rs. 106.18 Crore whereas normative O&M expenses as per MYT Regulations, 2019 for the same FY 2019-20 is Rs. 92.64 Crore and this gap further increases in subsequent years. Therefore, O&M Expenses determined on the basis of norms provided in Regulation 45 of MYT Regulations, 2019 are highly insufficient, skewed as compared to MYT Regulations, 2014.

6.5.7 The Petitioner apprise that the Commission has been pioneering in implementation of various Regulations in the State of Uttar Pradesh. Further, the Ministry of Power

(MoP) has also issued several Rules and Regulations which are to be followed by the Petitioner and the details of some of the Regulations are as follows: -

1. **Uttar Pradesh Electricity Regulatory Commission (Standard of Performance) Regulations, 2019**: The Commission vide notification no. UPERC/Secy/Regulations/656 issued the UPERC (Standard of Performance) Regulations, 2019 ["SOP Regulations, 2019"] which is applicable on all the distribution licensees, their franchisee and the consumers in the State of Uttar Pradesh. The Commission in these regulations have made the Performance parameters more stringent and has considerably reduced time lines to resolve Consumer Complaints.
2. **Electricity (Rights of Consumers) Rules, 2020**: The Ministry of Power has introduced the Electricity (Rights of Consumers) Rules, 2020. These rules have made the Performance parameters more stringent and time lines to resolve Consumer Complaints have been reduced considerably.
3. **Directions of Ministry of Power (CEA) (Installation and Operation of Meters) (Amendment) Regulations, 2019:** Ministry of Power published the guidelines vide Notification Dated 17th August, 2021, in pursuance to the provisions made in clause 4(1) (b) of the Central Electricity Authority (Installation and Operation of Meters) (Amendment) Regulations, 2019 in regard to timelines for the replacement of existing meters with smart meters with prepayment feature. The Relevant para is reproduced below:

   Quote

   ………………..

   All feeders and distribution transformers (DTs) shall be provided with meters having AMR facility or covered under AMI, as per the timelines specified below:

   All feeders shall be metered by December, 2022.

   All DTs in electrical divisions having more than 50% consumers in urban areas with AT&C losses more than 15% in financial year 2019-20, and in all *other electrical divisions with AT&C losses more than 25% in financial year 2019-20, shall be metered by December, 2023.*

All DTs in areas other than those mentioned in (ii) above, shall be metered by March, 2025.

DTs and HVDS transformers having capacity less than 25 kVA may be excluded from the above timelines. …………………

Unquote

4. **Directions of Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021**: Bureau of Energy Efficiency vide notification no. 18/1/bee/discom/2021 dated 6th October, 2021 has made the "The Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021". The said Regulations has defined the times lines for Feeder & DT Metering, Energy Accounting and Process of Energy Audit. The following are the key direction and timelines mentioned in the above-mentioned Regulations;

a) Every electricity distribution company shall conduct an annual energy audit for every financial year and submit the annual energy audit report to the Bureau and respective State Designated Agency and also made available on the website of the electricity distribution company within a period of four months from the expiry of the relevant financial year

b) Every electricity distribution company shall ensure that all feeder wise, circle wise and division wise periodic energy accounting shall be conducted by the energy manager of the electricity distribution company for each quarter of the financial year and submit the periodic energy accounting report to the Bureau and respective State Designated Agency and also made available on the website of electricity distribution company within forty-five days from the date of the periodic energy accounting.

c) The electricity distribution company shall establish an information technology enabled system to create energy accounting reports without any manual interference.

d) The electricity distribution company shall create a centralized energy accounting and audit cell comprising of:

I. Every electricity distribution company shall designate a nodal officer, who shall be a full-time employee of the electricity distribution company in the rank of the Chief Engineer or above, for the purpose of reporting of the annual energy audit and periodic energy accounting and communicate the same to the Bureau.

II. a nodal officer, an energy manager and an information technology manager, having professional experience of not less than five years;

III. a financial manager having professional experience of not less than five years.

e) The energy accounting and audit system and software shall be developed to create monthly, quarterly and yearly energy accounting reports.

f) Every electricity distribution company shall provide the details of the information technology system in place as specified in clause (f) of regulation 5 that ensures minimal manual intervention in creating the energy accounting reports and any manual intervention of any nature, in respect of the period specified therein, shall be clearly indicated in the periodic energy accounting report.

5. **Directions of the Commission for 100% Feeder Metering:** The Commission vide its tariff order dated 4th Dec 2020 and dated 26th August 2021 also directed the Company to ensure 100% feeder metering and DT metering with energy audit within next one year.

6. **Cyber Security related Regulations and Directions:**

a) In view of the ever-rising risks associated with cyber security for both IT (Information Technology) and OT (Operational Technology) Infrastructure, the Ministry of Power and various other government bodies have issued a series of Regulations and Directions to the Power Utilities including the Company. To comply with the aforesaid regulations and directions, the Company has to share cyber security related information/details to the respective agencies and more importantly need to upgrade its capabilities to counter the cyber security-related threats simultaneously. In this regard, following are the details of the recent Regulations / directions issued by various authorities: -

I. **Central Electricity Authority (CEA)**

- CEA, vide CEA-CH-13-12/4/2021-IT Division dated 8th Oct 2021, has issued "Guidelines on Cyber Security for Power Sector" to be complied by all Power Sector entities mandatorily;
- CEA has also directed all Power Sector entities to create, maintain and regularly practice (through mock drills) their "Cyber Crisis Management Plan (CCMP)". Compliance with the Cyber Crisis Management Plan requires multiple new initiatives to be implemented in the area of cyber security, such as implementation of Security Incident and Event Management software, Firewall for screening of network traffic between IT and OT networks, tool to scan traffic in OT networks, etc.
- All Power utilities also have to identify and report their "Critical Information Infrastructure (CII)" to CEA and NCIIPC to identify Nationwide CIIs in Power Sector.

II. **Computer Security Incident Response Team Power (CSIRT)**

- Central Electrical Authority vide letter no. CEA.CH-13-12/11/2021-IT-Div./348 dated October 06, 2021 has formed CSIRT to work as single Nodal Agency for Cyber Security for entire power sector to deal with all emergencies of Cyber security in entire power sector.

b) To comply with the Regulations and Directions issued by various agencies mentioned above and specially to comply with the mandatory requirements of "Guidelines on Cyber Security for Power Sector" issued by the CEA, the Company need to take following steps:

- Continuous Monitoring (24x7) for Cyber Security related events and incidents occurring in IT and OT infrastructure and assets
- Regular monitoring and maintenance of Data Centre and related assets

- Timely reporting to all agencies for various requirements of compliance
- Procurement and maintenance of hardware, software and tools required for Cyber Security
- Maintain adequate number of skilled manpower to manage all compliances and also regularly upgrade skill sets for the involved manpower to meet latest International Cyber trends and challenges
- Carry out regular training and awareness session for the entire employee base and external parties on Cyber Security related matters.
- Engage external auditors and consultants time to time to check if Company's Cyber Security Posture is up to the required standards and what other measures can be taken to improve the same.

c) Accordingly, the Petitioner is required to create infrastructure for compliance of the above Regulations and Directions. For the aforesaid purpose, The Petitioner need to procure and install additional infrastructure (including servers, Firewall, communication bandwidth, network devices, Data Centre devices, etc) and cyber security related software and tools like Antivirus, Security Information and Event Management (SIEM), OT Visibility Tool, Security Operation Centre (SOC), Endpoint Detection and Response (EDR), Mobile Device Management (MDM), etc to facilitate compliance of the Directions of the above mentioned Governing Bodies.

d) To comply with the requirement of "Guidelines on Cyber Security for Power Sector" issued by the CEA, the Petitioner also needs to appoint and maintain an in-house Information Security Team with adequate manpower and with members like Chief Information Security Officer (CISO), Deputy/Alternate CISO and other necessary resources to manage cyber security for the organization and monitor various tools and software, etc. which will also add to the O&M on regular basis to comply with the need to continuously upgrade the skills of the employees responsible for managing cyber security.

e) Thus, in order to comply with the above-mentioned Regulations and Guidelines, the Company is required to purchase new hardware, software and tools and also required to recruit additional competent manpower leading to additional expenses O&M Expenses.

6.5.8 It requires to create infrastructure for compliance of the above regulations, therefore DT and Feeder metering project is being proposed to facilitate compliance of the Directions of the Commission, Ministry of Power and Bureau of Energy Efficiency. The overall project comprises of installation and commissioning Energy Meters, LTCTs, Meter Boxes, associated communication devices along with HES application, Software Applications, IT Hardware, Data exchange and integration to fulfil the reporting requirements. Further, the installation and commissioning of DT meters, Feeders and HES and Software will also entail annual maintenance cost thereof and need to appoint Energy Manager, Financial Manager, IT Manager, Third Party Certified Accredited Energy Auditor etc. which will have additional employee cost and consequently, an additional administrative cost on regular basis.

6.5.9 Thus, in order to comply with the above new / amended Regulations, it requires to recruit additional competent manpower leading to additional expenses on employee cost, A&G expenses and R&M Expenses. Therefore, such additional O&M expenses required to be incurred to comply with the above Regulations promulgated subsequent to the MYT Regulations 2019, need to be allowed as additional O&M expenses over and above the normative O&M expenses determined under MYT Regulations 2019.

6.5.10 In this regard, the Petitioner submitted that it would like to bring the attention of the Commission towards regulations 25 (e) & (g) of the MYT Regulations, 2014, the same are being reproduced below: -

Quote

25. Operation & Maintenance Expenses

…………………..

(e) The One-time expenses and the expenses beyond the control of the Distribution Licensee shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check.

…………………..

Unquote

6.5.11 The Petitioner submitted that the Commission vide its Tariff Order dated August 26, 2021 and Tariff Order dated July 20, 2022 for the U.P. State DISCOMs had allowed additional R&M expenses equivalent to 50% of Normative R&M expenses to comply with SOP regulations in addition to the Normative O&M expense. The extract of relevant para of the above said Tariff Orders of the U.P. State DISCOMs are reproduced below: -

Quote

6.5.12 *Further, the Commission has directed the Licensees to strictly comply with the SoP regulations. Hence, for the first year of implementation, they would need additional support over and above the norms, to carry out the work and comply with the SoP Regulations and better consumer satisfaction. Hence, 50% of R&M expenses allowed for the year (as per norms) has been provided as additional one-time R&M expenses for proper execution of work in these difficult Covid time and to provide better services to the consumers also. The same shall be reviewed at the time of True-Up w.r.t. to the actuals to the satisfaction of the Commission.*

6.7.47. Further, in addition to the above, the Commission has approved new Regulations, which provides the framework for development of CGRF across the State in line with the provisions in the Electricity (Right of Consumers) Rules, 2020 notified dated December 31, 2020. The Regulation will be published in official Gazette shortly. As per this the constitution of CGRFs will be different from the existing framework which will result in increase in the number of CGRFs etc. As a result, the Petitioners will have to incur additional cost for successful implementation of these Regulations. Therefore, the Commission, provisionally allows 50% of R&M as additional O&M expenses for FY 2022-23 for constitution of CGRFs along with the implementation of SoP Regulations. The same shall be reviewed at the time of True-Up with respect to the actuals to the satisfaction of the Commission. The Petitioners are required to submit the expenses incurred *under the above provisional additional O&M expenses allowed along with the True Up of FY 2022-23.*

Unquote

6.5.13 The Petitioner has considered the impact of such additional O& M expenses @ 50% of the R&M Expenditure for the purpose of compliance of the New / amended Regulations and directions as mentioned above and requested the Commission to approve additional expenses equivalent to 50% of normative R&M Expenses over and above the normative O&M Expenses as being allowed to UPPCL's Discoms.

6.5.14 The Petitioner has projected O&M Expenses for FY 2023-24 at Rs. 182.89 Crore (net of employee cost capitalised) which includes additional expenditure for compliance of above referred additional Regulatory / SOP compliances as shown below: -

TABLE 6-51: O&M EXPENSES FOR FY 2023-24 (Rs. Crore)

Sl. No.	Particulars	Normative	Estimated
1	Repair & Maintenance Expenses	51.08	72.38
2	Employees Expenses	37.05	91.12
3	Administrative & General Expenses	24.74	29.36
4	Additional R&M for SOP Compliance etc.	25.54	Included above
5	**Total O&M Expenses**	**138.40**	**192.85**

6.5.15 The Petitioner submitted that the above shown A&G Expenses of Rs. 29.36 Crore includes Finance Charges of Rs. 3.18 Crore in line with the Regulation 45 of MYT Regulation, 2019. The O&M Expenses as determined on the basis of norms provided in Regulation 45 of MYT Regulations, 2019 is highly insufficient, skewed and is not true reflection of actual expenses in accordance with the business parameters as there is huge gap between the estimated O&M expenses and amount approved by the Commission on normative basis in accordance with the Regulations 45 of MYT Regulations, 2019. Thus, the Petitioner requested the Commission to consider the O&M expenses for FY 2023-24 as projected, which are commensurate with its size of the business and necessary to run operations efficiently owing to various factors which are beyond the control of the Petitioner.

Capitalization of Employee Cost

6.5.16 The Petitioner has estimated to capitalize an amount of Rs. 12.00 Crore out of total employee cost of Rs. 91.12 Crore estimated to be incurred during FY 2023-24, as per past practice duly approved by the Commission. For the purpose of capitalization of employee costs, the Petitioner at the time of execution of project, records actual man hours spent by each engineer / executive into the system / SAP Software. These hours are then matched with the cost per hour of that employee by software itself and actual employee cost so incurred, is capitalized along with specific project and the entire process of its project / financial accounting is through SAP, and there is least manual intervention in computation of expenses to be capitalized. Further, these man-hours and cost are duly verified by its auditors and also approved by its Board of Directors subsequently. Based on the above submission, the Petitioner requested the Commission to approve the net O&M expenses as Rs. 180.85 Crore for FY 2023-24, subject to truing up as shown below:-

TABLE 6-52: O&M EXPENSES FOR FY 2023-24 (Rs. Crore)

Sl. No.	Particulars	Normative	Estimated
1	Repair & Maintenance Expenses	51.08	72.38
2	Employees Expenses	37.05	91.12
3	Administrative & General Expenses	24.74	29.36
4	Additional R&M for SOP Compliance etc.	25.54	Included above
5	**Total O&M Expenses**	**138.40**	**192.85**
6	Employee Cost Capitalised	(12.00)	(12.00)
7	**Net O&M Expenses**	**126.40**	**180.85**

Commission's Analysis

6.5.17 Regulations 45 of MYT Regulations, 2019 specifies as under:

Quote

45 Operation & Maintenance Expenses

a) The Operation and Maintenance expenses for the Distribution Business shall be computed as stipulated in with these Regulations.

b) The Operation and Maintenance expenses shall be derived on the basis of the average of the Trued-Up values (without efficiency gain / loss) for the last five (5) financial years ending March 31, 2019 subject to prudence check by the Commission. However, if Trued-Up values (without efficiency gain / loss) are not available for FY 2018-19, then last five (5) available Trued-Up values (without *efficiency gain / loss) will be considered and subsequently when the same are available the base year value (i.e. FY 2019-20) will be recomputed.*

c) The average of such operation and maintenance expenses shall be considered as Operation and Maintenance expenses for the middle year and shall be escalated years-on-year with the escalation factor considering CPI and WPI of respective years in the ratio of 60:40, for subsequent years up to FY 2019-20.

d) The One-time expenses such as expense due to change in accounting policy, arrears paid due to Pay Commissions, etc., and the expenses beyond the control of the Distribution Licensee such as dearness allowance, terminal benefits, etc., in Employee cost, shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check.

e) At the time of Truing-up of the O&M expenses, the actual point to point inflation over Wholesale Price Index numbers as per Office of Economic Advisor of Government of India and the actual Consumer Price Index for Industrial Workers (all India) as per Labour Bureau, Government of India, in the concerned year shall be considered.

45.1 Employee Cost

Employee cost shall be computed as per the following formula escalated by consumer price index (CPI), adjusted by provisions for expenses beyond the control of the Licensee and one-time expected expenses, such as recovery / adjustment of terminal benefits, implications of Pay Commission, arrears, Interim Relief, etc.:

EMPn= EMPn-1 × (1+ CPI inflation)

Where:

EMPn: Employee expense for the nth year;

EMPn-1: Employee expense for the (n-1)th year;

CPI inflation is the average of Consumer Price Index (CPI) for immediately preceding three Financial Years.

45.2 Repairs and Maintenance Expense

Repairs and Maintenance expense shall be calculated by following formula:

R&Mn= R&Mn-1 (1+ WPI inflation)

Where:

R&Mn: Repairs & Maintenance expense for the nth year;

R&Mn-1: Repairs & Maintenance expense for the (n-1)th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years.

45.3 Administrative and General Expense

A&G expense shall be computed as per the following formula escalated by wholesale price index (WPI) and adjusted by provisions for confirmed initiatives (IT etc. initiatives as proposed by the Distribution Licensee and validated by the Commission) or other expected one-time expenses:

A&Gn= A&Gn-1 (1+ WPI inflation)

Where:

A&Gn: A&G expense for the nth year;

A&Gn-1: A&G expense for the (n-1)th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years: Provided that Interest and Finance charges such as Credit Rating charges, collection facilitation charges, financing cost of Delayed Payment Surcharge and other finance charges shall be a part of A&G expenses.

Illustration: For FY 2020-21, (n-1) the year will be FY 2019-20 which is also the base year.

Unquote

6.5.18 The Petitioner in its reply to deficiency regarding smart meter submitted that smart rollout plan will be prepared for particular area in Greater Noida and the Petitioner will submit its plan for the same and seek prior approval of the Commission.

6.5.19 The Commission is of the view that installation of smart meters may happen in the following cases: -

(a) For existing consumer's replacement of smart meters, the cost cannot be recovered from the consumers as the consumers have already paid the meter cost. Hence, it cannot be claimed under the capex, so it will not be part of ARR.
(b) For new consumers or burnt or defective meter, charges will be taken from consumers as per cost data book and hence cannot be part of ARR.

Thus, smart meters will be installed through Consumer Contributions which will be adjusted in total capex of the financial year. Thus, smart meter capex cannot be approved and will not be part of ARR.

6.5.20 With roll out of Smart Meters, the billing and collection efficiency of the Petitioner will increase thereby reducing the commercial losses. It is expected that the overall O&M cost of the Petitioner would also decrease due to improved billing & collection efficiency which would be compensated by the charges paid in OPEX model. Since the improvement in collection and billing efficiency has been envisaged which will be realized as a result of installation of smart meters, the net benefit / gain to the Petitioner is without any increase in the consumer tariffs, which means that such a scheme should be self-sustaining and hence the operational cost shall not be part of ARR. The same approach has been adopted in the case of State Discoms.

6.5.21 Regulation 45.3 of MYT Regulations, 2019, stipulates that the Interest and Finance charges such as Credit Rating charges, collection facilitation charges, financing cost of Delayed Payment Surcharge and other finance charges have been considered as a part of A&G expenses. Accordingly, the finance charges have been considered as a part of A&G expenses and not allowed separately as claimed by the Petitioner.

6.5.22 The Commission has already discussed the detailed approach of O&M expenses in the True-Up Chapter of this Order and approved component wise O&M expenses for FY 2021-22. Considering the normative employee expenses, A&G expenses and R&M expenses of FY 2021-22 and inflation indices as per the MYT Regulations, 2019, the Commission has computed normative O&M expenses for FY 2023-24, as shown in the Tables below: -

Table 6-53: Month wise CPI & WPI Considered by the Commission

Particulars	Whole Sale Price Index				Consumer Price Index			
	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
April	121.10	119.20	132.00	152.30	312.00	329.00	345.89	367.78
May	121.60	117.50	132.90	155.00	314.00	330.00	347.33	371.52
June	121.50	119.30	133.70	155.40	316.00	332.00	350.50	372.10
July	121.30	121.00	135.00	154.00	319.00	336.00	353.66	374.11
August	121.50	122.00	136.20	153.20	320.00	338.00	354.24	374.98
September	121.30	122.90	137.40	151.90	322.00	340.13	355.10	378.14
October	122.00	123.60	140.70	152.90	325.00	344.16	359.71	381.60
November	122.30	125.10	143.70	152.50	328.00	345.31	362.02	381.60
December	123.00	125.40	143.30	150.50	330.00	342.14	361.15	381.02
January	123.40	126.50	143.80	150.70	330.00	340.42	360.29	382.46
February	122.20	128.10	145.30	150.90	328.00	342.72	360.00	382.18
March	120.40	129.90	148.90	150.90	326.00	344.45	362.88	383.90
Average	**121.80**	**123.38**	**139.41**	**152.52**	**322.50**	**338.69**	**356.06**	**377.62**
Calculation of Inflation	**-**	**1.29%**	**13.00%**	**9.40%**	**-**	**5.02%**	**5.13%**	**6.05%**

Table 6-54: INFLATION INDEX CONSIDERED BY THE COMMISSION

FY	INDEX		INFLATION RATE		Average of Last 3 Years	
	WPI	CPI	WPI	CPI	WPI	CPI
FY 2017-18	114.88	284.42	2.92%	3.08%	-	
FY 2018-19	119.79	299.92	4.28%	5.45%		
FY 2019-20	121.80	322.50	1.68%	7.53%	2.96%	5.35%
FY 2020-21	123.93	338.69	1.29%	5.02%	2.42%	6.00%
FY 2021-22	139.38	356.06	13.00%	5.13%	**5.32%**	**5.89%**
FY 2022-23	152.82	376.53	9.40%	6.05%	**7.90%**	**5.40%**

Index file for CPI Source: ***https://labourbureau.gov.in/all-india-general-index-1***
Index file for WPI Source: *https://eaindustry.nic.in/download_data_1112.asp*

Table 6-55: NORMATIVE O&M EXPENSES COMPUTED BY THE COMMISSION (Rs. Crore)

Particulars	Formula	Normative Value for FY 2021-22	Inflation Factor for FY 2022-23	Normative Value for FY 2022-23	Inflation Factor FY 2023-24	Normative Value for FY 2023-24
		A	B	C=A*(1+B)	D	E=C*(1+D)
Employee Expenses	a	31.00	5.89%	32.82	5.40%	34.60
R & M Expenses	b	43.22	5.32%	45.52	7.90%	49.12
A&G Expenses (with FC)	c	16.02	5.32%	16.87	7.90%	18.21
Gross O&M Expenses	d=a+b+c	90.24	-	95.22	-	101.92

6.5.23 The Employee Expenses for FY 2023-24 are computed by escalating the year (FY 2022-23) employee expenses by average CPI inflation of last 3 years (5.40%). The A&G expenses (including Finance Charges) and R&M expenses for FY 2023-24 are computed by escalating the respective value of FY 2022-23 by average WPI inflation of last 3 years (7.90%). The Commission for FY 2023-24 has considered the employee expense capitalisation same as claimed by the Petitioner, subject to prudence check at the time of truing up.

6.5.24 With regard to the Petitioner's claim towards additional expenses for compliance of newly promulgated Regulations over and above the normative expenses as being allowed to UPPCL's Discoms also, the Commission is of the view that there is no comparison in the operations of the 5 State Discoms & the Petitioner. The State Discoms cover almost the full state & have a vast network with high losses & also a non-favorable consumer mix as compared to the Petitioner. Taking the same into consideration, the Commission does not approve the claim of the Petitioner in regard to allowing the additional cost (O&M) as done for State Discoms.

6.5.25 Further, the Commission has already disallowed the financing cost of DPS & additional claim of impact of GST therefore these claims have not been considered while approving the norms for O&M expenses for FY 2023-24.

6.5.26 Thus, the O&M Expenses approved by the Commission for FY 2023-24 is as follows:-

Table 6-56: NORMATIVE O&M EXPENSES APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Particulars	Formula	Normative (Petitioner)	Claimed by Petitioner	Normative (Computed)	Approved
Employee Expenses	a	37.05	91.12	34.60	34.60
R & M Expenses	b	51.08	72.38	49.12	49.12

Particulars	Formula	Normative (Petitioner)	Claimed by Petitioner	Normative (Computed)	Approved
A&G Expenses (with FC)	c	24.74	29.36	18.21	18.21
Add: Smart Metering Opex/ Smart Metering/ DT Metering / SOP implementation OPEX	d	25.54	Included Above	0.00	0.00
Gross O&M Expenses	e=a+b+c+d	**138.40**	**192.85**	101.92	**101.92**
Less: Employee Expenses Capitalisation	f	12.00	12.00	-	12.00
Net O&M Expenses	g=e-f	**126.40**	**180.85**	**-**	**89.92**

6.6 CAPITAL EXPENDITURE

Petitioner's Submission

6.6.1 The Petitioner submitted that taking into account various existing and upcoming Government & Private projects in and around Greater Noida and demand estimates for FY 2023-24, the Petitioner has prepared its capital expenditure plan for

FY 2023-24 at Rs. 326.42 Crore (including consumer contribution and excluding assets handed over by GNIDA and Others) as provided in the Table below: -

TABLE 6-57: CAPITAL EXPENDITURE AS SUBMITTED BY THE PETITIONER FOR FY 2023-24 (Rs. Crore)

Sl. No.	Particulars	Estimated
1	Capital Expenditure Projects of value exceeding Rs. 10 Crore	100.88
2	Capital Expenditure Projects of value not exceeding Rs. 10 Crore	213.54
3	**Subtotal**	**314.42**
4	Add: Salary Capitalisation	12.00
5	**Total**	**326.42**
6	Less: Consumer Contribution	(59.42)
7	Less: Asset Retirement	(11.60)
8	**Net Capital Expenditure**	**255.40**

6.6.2 Regulation 44.2 of the MYT Regulations, 2021 specifies as under:

Quote

44.2 The Capital Investment Plan shall be a least cost plan for undertaking investments. However, all capital expenditure projects of value exceeding Rs. Ten Crore and must have prior approval of the Commission on quarterly basis, and will be subject to prudence check.

Unquote

6.6.3 Accordingly, item-wise details of the gross capital expenditure of projects duly segregated between the aggregate value of projects exceeding Rs. 10 Crore and below Rs. 10 Crore, are tabulated below: -

TABLE 6-58: CAPITAL EXPENDITURE PROJECTS OF VALUE EXCEEDING RS. 10 CRORE SUBMITTED BY PETITIONER FOR FY 2023-24 (Rs. Crore)

Sl. No.	Nature of Works	Projected
1	Power Evacuation from new / upcoming 220 kV & 132 kV Substations being constructed at Greater Noida during FY 2023-24	87.33
2	Investments to Build Cyber Resilience	13.54
	Total	100.88

TABLE 6-59: CAPITAL EXPENDITURE PROJECTS OF VALUE NOT EXCEEDING RS. 10 CRORE SUBMITTED BY THE PETITIONER FOR FY 2023-24 (Rs. Crore)

Sl. No	Nature of Works	Estimated
1	New Connections, Replacement Stock & Metering	105.23
2	Construction of Substations, Transformers, and Construction of 33kV, 11 kV & LT Network	60.17
3	Loss Control Activity	8.86
4	Process System Automation	16.95
5	IT Projects	9.42
6	Civil Works & Office Infrastructure Facility	6.05
7	Tools & Testing Equipment	3.37
8	Vehicles	3.49
9	Demand Side Management	1.00
10	**Total**	**213.54**

6.6.4 Item-wise details of quantity and cost of the aforesaid capex for Power Evacuation from new / upcoming 220 kV & 132 kV Substations being constructed at Greater Noida during FY 2023-24 submitted by the Petitioner is as follows: -

TABLE 6-60: TOTAL COST OF ELECTRICAL WORKS SUBMITTED BY THE PETITIONER FOR FY 2023-24

Proposed 33/11kV Substations cum Switching Stations Detail	Electrical Cost in Rs. Crore
Construction of 33kV Switching cum 33/11kV Substation with AIS Switchboard **at Sector-10, Greater Noida West (1X12.5MVA)**	4.85
Construction of 33kV Switching cum 33/11kV Substation with 33kV Double Bus GIS Switchboard **at Sector 4, Greater Noida West (1X12.5MVA)**	7.90
Construction of 33kV Switching cum 33/11kV Substation with 33kV Double Bus GIS Switchboard **at Sector-1/Sector-3, Greater Noida West (2X12.5MVA)**	10.84
Construction of 33kV Switching cum 33/11kV Substation with 33kV Double Bus GIS Switchboard **at Sector Ecotech-8 (1X12.5MVA), Greater Noida**	7.90

Construction of 33kV Switching cum 33/11kV Substation with 33kV Double Bus GIS Switchboard **at Sector Ecotech-10 (1X12.5MVA), Greater Noida**	7.90
Net Value in Rs. Crores	**39.40**

TABLE 6-61: 33KV FEEDER EVACUATION PLAN FOR FY 2023-24

Details of 33kV Cable Laying Proposals	UOM	QTY	Value in Rs. Crore
Laying of 33kV 3CX400 sq. mm XLPE Cable for Network Development and Power Evacuation from new **220/33kV GIS Substation at Jalpura**	kM	19	7.06
Laying of 33kV 3CX400 sq. mm XLPE Cable for Network Development and Power Evacuation from new **220/33kV GIS Substation at KP-5**	kM	6	2.23
Laying of 33kV 3CX400 sq. mm XLPE Cable for Network Development and Power Evacuation from new **132/33kV GIS Substation at Ecotech-8**	kM	7	2.6
Laying of 33kV 3CX400 sq. mm XLPE Cable for Network Development and Power Evacuation from new **132/33kV GIS Substation at Ecotech-10**	kM	14	5.2
Isolator Installation with Chair Structure	No.	40	1.09
33 KV Import Feeder Metering	No.	12	0.36
Net Total in Rs. Crores			**18.54**

TABLE 6-62: DETAILS OF 11KV CABLE LAYING PROPOSALS FOR FY 2023-24

Details of 11kV Cable Laying Proposals	UOM	QTY	Value in Rs. Crore
Power evacuation and feeder construction from new 33/11kV substations UG mains with 300Sqmm Cable	kM	15	3.61
11kV Isolator Installation	Nos.	20	0.12
Installation of Chair Structure for Isolator	Nos.	20	0.32
Net Value in Rs. Crores			**4.05**

TABLE 6-63: PROPOSED 33/11KV SUBSTATIONS FOR FY 2023-24

Proposed 33/11kV Substations cum Switching Stations Detail	Land Cost in Rs. Crore
Construction of 33kV Switching cum 33/11kV Substation with 33kV Double Bus GIS Switchboard **at Sector 4, Greater Noida West (1X12.5MVA)**	4.06
Construction of 33kV Switching cum 33/11kV Substation with 33kV Double Bus GIS Switchboard **at Sector Ecotech-8 (1X12.5MVA), Greater Noida**	2.04
Construction of 33kV Switching cum 33/11kV Substation with 33kV Double Bus GIS Switchboard **at Sector Ecotech-10 (1X12.5MVA), Greater Noida**	2.04
Total Cost of Land in FY 2023-24	**8.15**

TABLE 6-64: LOCATIONS OF 33/11KV SUBSTATION CUM SWITCHING STATIONS FOR FY 2023-24

Proposed 33/11kV Substations cum Switching Stations Detail	Civil Cost in Rs. Crore
Construction of 33kV Switching cum 33/11kV Substation with AIS Switchboard **at Sector-10, Greater Noida West (1X12.5MVA)**	2.75
Construction of 33kV Switching cum 33/11kV Substation with 33kV Double Bus GIS Switchboard **at Sector 4, Greater Noida West (1X12.5MVA)**	3.38
Construction of 33kV Switching cum 33/11kV Substation with 33kV Double Bus GIS Switchboard **at Sector-1/Sector-3, Greater Noida West (2X12.5MVA)**	3.38
Construction of 33kV Switching cum 33/11kV Substation with 33kV Double Bus GIS Switchboard **at Sector Ecotech-8 (1X12.5MVA), Greater Noida**	3.38
Construction of 33kV Switching cum 33/11kV Substation with 33kV Double Bus GIS Switchboard **at Sector Ecotech-10 (1X12.5MVA), Greater Noida**	3.38
Net Value in Rs. Crores	**16.27**

Table 6-65: Total Cost for FY 2023-24

Particulars	Cost in (Rs. Crore)
Substation Automation System viz, RTU System, integration of numerical relays, MFMs, battery charger, RTCC etc. and integration with SCADA system	0.43
Implementation of CCTV Surveillance System, Video Management System	0.19
Upgrading of Networking Infrastructure	0.30
TOTAL	**0.92**

TABLE 6-66: PROPOSED CAPITAL EXPENDITURE FOR FY 2023-24

Sl. No.	New Schemes	FY 23-24 in Rs. Cr.
1	33kV Switching Station cum 33/11 kV Substation	39.40
2	33 kV Network Development	18.54
3	11 kV Network Development	4.05
4	Land to be Acquired for Construction of New 33/11kv Substations Cum Switching Stations	8.15
5	Civil Works for Switching Station/Substation	16.27
6	Smart Substations & Automation & Security	0.92
7	**Total**	**87.33**

Evacuation Plan during FY 2024-25

6.6.5 The details of Power Evacuation from new / upcoming 220 kV & 132 kV Substations being constructed at Greater Noida during FY 2024-25 also comprehensive Power

Evacuation plan which will be undertaken by it during FY 2023-24 & FY 2024-25, which is as follows: -

A. Construction of Proposed 33/11 kV Substation cum 33kV Switching Stations:

6.6.6 The Petitioner proposes following 33/11 kV Substations cum 33kV Switching Stations in FY 2024-25 for distributing the power evacuated from new Grid Substations and manage the increasing load demand in the area:

1. 33/11 kV Substation cum Switching Station with DB GIS at Sector Techzone-2, G (Industrial)
2. 33kV Switching Station with DB GIS at Sector KP-5 ESS-1, GNW (Institutional/Urban)
3. 33kV Switching Station with DB GIS at Sector Omicron-1A, GN (Urban)

Brief Description all the above Substations are as follows:

6.6.7 The Petitioner has planned to construct 33/11kV Substation cum Switching Station and 33kV Switching Stations in Greater Noida area at the following locations to meet the demand of upcoming consumers in the area in FY 2024-25.

A1. 33/11kV Substation cum Switching Station with DB GIS at Techzone-2 (Industrial Area):

6.6.8 The brief configuration of the Substation cum Switching Station is as follows:

i) 33 kV: Two incomers, One Bus coupler/ Bus Adapter, Two No's. of Transformer Feeders and Four Feeder Outgoings with DB GIS Switchboards.
ii) 11 kV: One Incomer and Five Outgoing Feeders.
iii) 33/11 kV Transformers: 1 No. of Transformer with capacity of 12.5 MVA with NIFPES.

6.6.9 The above 33/11kV Substation cum Switching Station is proposed in fast developing industrial sector Techzone-02 which is an industrial cum Institutional Sector. A new 132/33kV Grid Substation (GIS) is also proposed in nearby sector which is only 2.5 kms away. Hence, the connectivity at 33kV voltage level is proposed from the above mentioned 132kV Substation. The 33kV switching through GIS will ensure better control and operability to industrial units and institutional consumers demanding new connections in the sector and sectors nearby. In addition, 33/11kV transformer will cater to the demand of 11 kV & LT consumers. The tentative project cost of Electrical Works shall be Rs. 7.90 Crores and the Substation will be constructed on the land which was acquired in January 2020 at the cost of Rs. 3.48 Crore and capitalised & claimed in True-up of FY 2019-20.

A2. 33kV Switching Station with DB GIS at Sector KP-5, ESS-1 (Institutional/Urban Area):

6.6.10 The brief configuration of the Substation cum Switching Station is as follows:

i) 33 kV: Two incomers, One Bus coupler/ Bus Adapter and Six Feeder Outgoings with DB GIS Switchboard.

6.6.11 The 33kV Switching Station is proposed in institutional sector KP-5. A new 220/33kV Substation (GIS) is also proposed in the same sector. Hence, according to the Evacuation Plan of new 33kV Feeders from 220/33kV Receiving Substation at KP-5, the connectivity at 33kV voltage level is proposed from the same. The power evacuated through new 33kV feeders shall be further distributed through switching station to different 33/11kV Substations and 33kV consumers in sectors nearby for better control and inter-operability at 33/11kV Substation level. The tentative project cost of Electrical Works shall be Rs. 4.69 Crores and the substation will be constructed on the land acquired in March 2014 for KP-5 220 kV substation at the cost of Rs. 23.72 Crore and was capitalized and already claimed in True-up of FY 2013-14.

A3. 33kV Switching Station with DB GIS at Sector Omicron-1A (Urban Area):

6.6.12 The Company has been allotted an ESS plot measuring 3000 sq. meters in Sector Omicron-1A, Greater Noida. As the sector is developing and the occupancy level is increasing on annual basis, the Company proposes to construct a 33kV Switching Station in this sector. As the sector is along the 130-meter wide road and well located as far as the connectivity from 220 kV RC Green Substation and upcoming 132/33kV Substations at sector Ecotech-8 & Ecotech-10. Thus, 33kV Switching Station shall be useful in further distributing the power from the above-mentioned Receiving Substations to existing and upcoming 33/11kV Substations and consumers.

6.6.13 The configuration of 33kV DB GIS for Switching Station shall be as follows:

i) 33 kV: Two incomers, One Bus coupler/ Bus Adapter and Six Feeder Outgoings with DB GIS Switchboard.

The tentative project cost of Electrical Works shall be Rs. 4.69 Crores and the Substation will be constructed on the land which was acquired in January 2016 at the cost of Rs. 4.45 Crore and same has already been capitalized and claimed in True-up of FY 2016.

Table 6-67: Total Cost of 33/11kV Substations cum Switching Stations Detail for FY 2024-25

Proposed 33/11kV Substations cum Switching Stations Detail	Electrical Cost in Rs. Crore
33/11kV Substation cum Switching Station with DB GIS at **Techzone-2**	7.90
33kV Switching Station with DB GIS at **Sector KP-5, ESS-1**	4.69
33kV Switching Station with DB GIS at **Sector Omicron-1A**	4.69
Net Value in Rs. Crores	**17.28**

B. 33 kV Feeder Evacuation Plan

6.6.14 The Company shall be laying new 33kV 3CX400 sq. mm cables from the proposed 220/33kV and 132/33kV Receiving Substations to existing or upcoming new 33/11kV Substations or 33/11kV Substations cum Switching Stations for the below benefits:

- N-1 Redundancy at 33kV Feeder Level for 33/11kV Substation with connectivity from 2 different Receiving Substations;
- Reducing the existing 33kV Feeder length currently originating from 220kV RC Green Substation or 132kV Surajpur etc.;
- Ease the overloading of present 33kV Feeders which further deteriorates the life of UG Cables etc.;
- Improved voltage profile during peak loading/summer season due to overloading and excessive feeder length;

6.6.15 The Petitioner submitted the 33 kV Feeder Evacuation Plan for above mentioned Grid Substations, is as mentioned in Table below: -

TABLE 6-68: 33KV FEEDER EVACUATION PLAN FOR FY 2024-25

Details of 33kV Cable Laying Proposals	UOM	QTY	Cost in Rs. (Cr.)
Laying of 33kV 3CX400 sq. mm XLPE Cable for Network Development and Power Evacuation from new **220/33kV GIS Substation at Jalpura**	kM	6	2.23

Details of 33kV Cable Laying Proposals	UOM	QTY	Cost in Rs. (Cr.)
Laying of 33kV 3CX400 sq. mm XLPE Cable for Network Development and Power Evacuation from new **220/33kV GIS Substation at KP-5**	kM	2	0.74
Laying of 33kV 3CX400 sq. mm XLPE Cable for Network Development and Power Evacuation from new **132/33kV GIS Substation at Ecotech-8**	kM	13	4.83
Laying of 33kV 3CX400 sq. mm XLPE Cable for Network Development and Power Evacuation from new **132/33kV GIS Substation at Ecotech-10**	kM	21	7.80
Isolator Installation with Chair Structure	Nos.	40	1.09
33 KV Import Feeder Metering	Nos.	22	0.66
Net Value in Rs. Crores			**17.36**

C. 11KV Network Development

6.6.16 To further distribute the power from the above mentioned 33/11kV Substations at 11kV voltage level, laying of 3CX300 sq.mm XLPE cable shall be done to evacuate new 11kV Feeders and cater the load growth in the areas where these substations are proposed.

TABLE 6-69: 11KV NETWORK DEVELOPMENT FOR FY 2024-25

Details of 11kV Cable Laying Proposals	UOM	QTY	Value in Rs. Cr.
Power evacuation and feeder construction from new 33/11kV substations UG mains with 300Sqmm Cable	kM	3	0.72
11kV Isolator Installation	Nos.	10	0.06
Installation of Chair Structure for Isolator	Nos.	10	0.16
Net Value in Rs. Crores			**0.94**

D. Civil Work for Construction of New 33/11kv Substations and 33kv Switching Stations Proposed:

6.6.17 The civil work shall be required for the construction of new 33/11 kV Substations cum Switching Stations, 33kV Switching Stations, associated Boundary walls etc. The Company proposes the following works for FY 2024-25.

i) Construction of 33/11kV Power Transformer O/D yard with plinth and firewall, Control Room Building with associated HT/LT cable trenches, Guard Room, RCC

Road etc. at **Sector Techzone-02** for the construction of 33/11kV Substation cum Switching Station.

ii) Construction of Control Room Building with associated cable trenches, RCC Road and Guard Room for 33kV Switching Stations at **Sector KP-5 and Omicron-1A.**

The following is the summary CAPEX for new 33/11kV Substations cum 33kV Switching Stations for civil work construction:

TABLE 6-70: CAPEX FOR NEW 33/11KV SUBSTATIONS FOR 2024-25

Substation/Switching Station Name	Civil Cost in Rs. Crore
33kV Switching cum 33/11kV Substation at Sector-Techzone-2	2.89
33kV Switching Station at KP-5 ESS 1	1.68
33kV Switching Station at Omicron-1A	1.68
TOTAL	**6.25**

E. Smart Substations & Automation & Security of New Substations

6.6.18 In relation to the 3 new Sub-station to be constructed in FY 2024-25, Company will also incur the CAPEX for installing new RTU System, integration of numerical relays, MFMs, battery charger, RTCC etc. & integration with SCADA system and implementation of CCTV Surveillance System, Video Management System & upgradation of networking infrastructure to accommodate the new substations to provide the services more reliably & timely basis.

Table 6-71: Smart Substations & Automation & Security of New Substations for FY 2024-25

Particulars	Cost in (Rs. Crore)
Substation Automation System viz,RTU System, integration of numerical relays, MFMs, battery charger, RTCC etc. and integration with SCADA system	0.26
Implementation of CCTV Surveillance System, Video Management System	0.12
Upgrading of Networking Infrastructure	0.18
TOTAL	**0.55**

6.6.19 The Petitioner submitted the overall summary of CAPEX for the Power Evacuation from new / upcoming 220 kV & 132 kV Substations being constructed at Greater Noida during FY 2024-25 as follows: -

TABLE 6-72: PROPOSED CAPITAL EXPENDITURE FOR FY 2024-25

Sl. No.	New Schemes	FY 2024-25 (in Rs. Crore)
1	33kV Switching Station cum 33/11 kV Substation	17.28
2	33 kV Network Development	17.36
3	11 kV Network Development	0.94
4	Civil Works for Switching Station/Substation	6.25
5	Smart Substations & Automation & Security	0.55
6	**Total**	**42.38**

F. Investments to Build Cyber Resilience

6.6.20 The Petitioner submitted that, recent years have borne witness to heightened risks related to cyber security and a series of incidents involving high profile breaches of cyber defenses at well-known institutions. The potential for destabilizing business operations and causing significant losses to customers and other stakeholders including reputational damage, cyber security has become the focus of attention for the management as well as in many government bodies regulating power sector. At present there are multiple Regulations relating to cybersecurity, applicable to power sector including CEA (Cyber Security in Power Sector) Guidelines, 2021, Directions dated April 28, 2022 from CERT-In of Ministry of Electronic and Information Technology under sub-section (6) of section 70B of the Information Technology Act, 2000 as well as other requirements issued by CEA, CERT-In and NCIIPC from time to time. As technologies associated with the Industrial/ OT networks are not geared to respond to cyber risks with agility, the possibility of malicious attacks on such networks leading to mal-operation of power networks cannot be ruled out.

6.6.21 The Petitioner in order to meet the requirements of compliance as well as to upgrade the readiness of the organization to deal with cybersecurity-related risks, the Company is undertaking steps to improve defence from the threats and build cyber resilience. Plans for FY 2023-24 included proposal for deployment of Managed Detection and Response (MDR) system to counteract threats such as ransomware and implementation of a Security Information and Event Management (SIEM) software to collate and correlate logs retrieved from all vulnerable devices so that actions can be taken to mitigate risks and eliminate threats. In order to deploy the above-mentioned solutions, the Petitioner is required to purchase new hardware, software and tools and also deploy additional competent manpower leading to additional expenses on employee cost, Capex expenses and Opex Expenses. Further, operation of a Security Operations Centre (SoC) to process the alerts generated by SIEM software and to take actions to mitigate threats is a necessity to manage the cyber risks effectively, which calls for skilled manpower as well as experienced managers. Accordingly, additional outlays in expenses have been included in the plans for FY 2023-24.

TABLE 6-73: TOTAL COST FOR CYBER RESILIENCE FY 2023-24 SUBMITTED BY THE PETITIONER

Particulars	Cost in (Rs. Crore)
Purchase, installation and implementation of **SIEM**	6.18
Purchase of Hardware for **SIEM**	2.32
Purchase, installation and implementation of **NBA** solution	2.58
Implementation & configuration of **Unified IT-OT SOC**	0.52
Purchase, installation and implementation of **MDM**	0.52
Purchase, installation and implementation of **EDR / XDR**	0.52
Purchase, installation and implementation of **PIM/ PAM**	0.93
TOTAL	**13.54**

6.6.22 Regulation 44.2 of the MYT Regulations, 2019 provides as under:

Quote

"44.2 The Capital Investment Plan shall be a least cost plan for undertaking investments. However, all capital expenditure projects of value exceeding Rs. Ten Crore and must have prior approval of the Commission on quarterly basis, and will be subject to prudence check."

Unquote

6.6.23 In compliance of the aforesaid provision, the Petitioner will be filing a separate petition for the prior approval of the Commission before implementation of these projects. The Commission is requested to kindly consider the aforesaid projects while approving the ARR for FY 2023-24 subject to specific approval as stated above.

G. Capital Expenditure Projects of value not exceeding Rs. 10 Crore for FY 2023-24

6.6.24 The capital expenditure projects of value not exceeding Rs. 10 Crore are proposed for developing and augmenting the Distribution Network and supporting facilities of the Company to meet its service obligation as defined in Code no. 4.1 and 4.2 of UP Electricity Supply Code, 2005 and also to meet growth in demand of electricity from its existing and future consumers. The above Capital Expenditure does not include any expenditure for the purpose of reduction of T&D Losses which are already at the least economically and technologically. Further, GNIDA, DMIC, UPSIDC, EPIP etc. are the local development authorities responsible for the development and upkeep of Greater Noida area. Every year the basic electric LT network developed by such agencies is handed over to the Company for facilitation of distribution of power to the consumers of Greater Noida and proper maintenance thereof without transferring the ownership of the same. Hence, for the purpose of accounting, upkeep and insurance, the Company considers these assets at the value declared by such agencies which is accordingly considered for the purpose of determination of tariff. Since the ownership of these assets is not transferred to the Company, they are not considered in addition to fixed assets. Hence, there is no impact on computation of ROE, interest on Term Loans and depreciation with respect to these assets. The value of actual asset handed over by GNIDA and others has not been included above and will be submitted along with the true-up petition. The details of Capital Expenditure Projects of value not exceeding Rs. 10 Crore capital during FY 2023-24 are given below:

A. New Connection, Replacement Stock & Metering

i. <u>New Services Connection / Load Augmentation</u>

a) The Petitioner, being the Distribution Licensee in Greater Noida Area of Uttar Pradesh, has an obligation to provide electricity connection to all the intending consumers in the Licensed area in accordance with Section 43 of the Electricity Act, 2003, after receiving applications and payment of estimates. The estimates are prepared on the basis of site survey and as per the approved rates in Cost Data Book of Hon'ble UPERC. The expenditure is, therefore, incurred to provide these service connections, which includes extension of the distribution mains, erection of transformers, laying service cables, erection of meters etc. to cater to the load.

b) Further, GNIDA and other state agencies, being the local development authorities, develops the basic electrical network in the newly developed sectors and hand over the same to the Company for operation and maintenance purposes. Since, GNIDA and other agencies only provides the possession of these assets for the purpose of distribution of electricity without transferring the ownership, the Company does not claim ROE, Interest or Depreciation on such assets being handed over by such agencies.

c) During FY 2021-22, NIDP Developers Pvt. Ltd, situated at Plot No.07, Knowledge Park-5, Greater Noida have applied for connection for 200 MW with connectivity at 220 kV. Accordingly, the Company in turn has requested UPPTCL to provide estimate for construction of two 220 kV lines from upcoming 220 kV Grid Substations of UPPTCL at Jalpura & Sector knowledge Park-5, Greater Noida along with two no. of 220kV GIS bays vide letter no. EHV-NIDP/FY2022-23/437 dated 24.08.2022. The aforesaid connectivity will be energised after installation of meters, CT / PT, Cubicles etc. in Q4 of FY 2023-24 post completion of UPPTCL's works. The aforesaid work of installation of meters, CT/ PT and allied equipment will be done under consumer contribution and the cost of the metering and other associated equipment will be capitalized in FY 2023-24 upon energisation.

d) In accordance with the latest amendment of Electricity Supply Code 2005, which mandates that all existing multi storied housing societies where power supply is being provided on Single Point bulk power scheme are required to be converted to Multi Point connections, wherein all individual flats are to be provided with meters by the DISCOM. The Amendment also states that all such new housing projects shall be designed to comply with the Multi Point power supply system. The cost to be incurred for the purpose is divided into three major sub-heads i.e. Meter cost, creation of Communication Infrastructure & IT – Licensing cost. Accordingly, the Company has proposed to convert 4000 connections along with new multipoint connections of 15000 in FY 2023-24.

e) In a push towards promoting use of renewable energy from the government and various support in the form of direct subsidies to the end-user from govt. agencies, more and more consumers have started to opt for installation of solar power systems in their dwelling units. This comprise of the net-metering consumers, gross-metering consumers and the net-billing consumers.

f) The capital expenditure is proposed towards metering & energy audit for solar consumers that are getting added in the network every year, to register and maintain accurate energy accounting for the solar consumers.

g) As per Cost Data Book, approved vide order dated July 01,2019, the Petitioner recovers service charges from the consumers applying for new connection/ load augmentation. The total amount recoverable is being reduced from the total cost of capital expenditure while considering the fund requirement, interest on loan and return on equity.

ii. Replacement of Network/Assets

a) The existing Electrical distribution network in the Licensed area is required to be upgraded by replacing the network elements from time to time in order to maintain the reliability and safety of electric supply. Owing to urbanization of Villages due to rapid development of Greater Noida area, it is proposed to replace PCC Poles installed earlier in villages with 12 mtr. Steel Tubular Poles and increase the height of the Distribution mains in order to maintain the requisite safety clearance across the license area.

b) As the Licenced area is seeing huge development and due to construction and excavation activities carried out by different agencies like GNIDA, IGL, BSNL etc., underground power cables frequently suffer from substantive damages, which at times require alteration of route, shifting of feeders / poles etc., therefore for shifting of Cable and Poles including relevant accessories are considered in the Capex to ensure continuity of supply to consumers.

c) As some equipment are at the verge of completion of their operational life cycle, the same need to be timely replaced for maintaining reliability of the network. The capital expenditure is proposed towards replacement & refurbishment of existing network / assets as mentioned above.

iii. Metering

a) <u>Replacement of Meter due to meters being Burnt/defective/stolen</u>

The Distribution Licensee is obligated to replace Meters owing to any one of the following three scenarios: -

I. **Burnt Meters –** Burning of meters happen mainly due to faults in the consumers' installations / overloading beyond the rated current carrying capacity / fault in consumer premises / tampering of meters mainly in villages. It has been noticed many times especially in villages that the meters were actually jostled / tempered for illicit purposes rendering warranty of the metering equipment null and void and therefore, cost of these replacements less amount recovered through service charges are being considered for the purpose of capital expenditure.

II. **Defective Meters –** This kind of scenario primarily arises due to derating and degradation of internal components of the meter such as defective display, scroll button not working or due to internal component failures. Hence, requirement of accurate energy reading necessitates replacement of defective meters. This is to confirm all the meters defects due to any manufacturing defects within guarantee period are replaced free of cost.

III. **Stolen Meters –** The theft of meters from consumer premises mostly occurs when the premises remains unoccupied and on arrival of consumers and his/ her complaints the company is asked to install meter. It also happens in the cases where meters has been shifted outside the premises of the consumer and the meter us damaged or stolen without the knowledge of the consumer.

b) Replacement of Instrument Transformers due to Burnt/defective

Metering arrangement including Meters, Instrument Transformers & Communication Modules (modems) are required to be maintained under certain operating conditions to prevent the metering system and associated communication equipment from malfunctioning/failures. Though all preventive measures are taken from company side including educating the consumers through text messages, WA messages, videos about maintaining the healthy operating environment in the meter rooms, it is observed that the meter room is not maintained properly and this results in failure of meter/instrument transformers. At times, the failure of meter/instrument transformers/modems may occur due to ageing factor. Failure of metering arrangement due to various reasons stated above necessitates the replacement of meter, instrument transformer along with communication modules to maintain the metering of consumers/network in healthy condition.

c) Other Metering Activities

i) Upgradation of Meters and Associated equipment's due to Technology Enhancement and improvement of Accuracy class

I. As the electronic meters' accuracy is mainly dependent on software and ICs, it becomes necessary to upgrade these meters from time to time with latest versions along with communication facility. Accordingly, meters of existing consumers shall be upgraded along with instrument transformers, if deemed necessary to maintain accurate energy account.

II. Clustered metering arrangement comprising set of 12-16 Bluetooth enabled meters installed inside the fenced enclosure, shall be taken up to prevent pilferage of electricity in theft prone clustered areas and to ensure meter reading over Bluetooth without manual intervention.

III. Strengthening/Refurbishment of Meter Board Panel at Market / Authority Grp Housing/other locations. The distribution system in the housing societies, commercial complexes, EWS dueling units etc. are developed by GNIDA and handed over to NPCL for extending new connections to the consumers. These panels are usually installed in open spaces where it gets subjected to harsh weather conditions. Over the period of time, these distribution panels and meters get deteriorated and needs replacement/refurbishment. Accordingly, strengthening/refurbishment need to be carried out on routine basis. The capital expenditure is proposed towards metering & energy audit as will also enable the Company to comply with the directions of the Hon'ble Commission in its Order dated 26th November, 2020 and Tariff Order dated 4th December, 2020

ii) Metering Software

Meter data analytics is very critical to maintaining healthy metering systems for consumer meters and network meters. Meter data analytics ensures timely identification of metering anomalies and paves way for timely rectification of the same, thereby ensuring availability of healthy metering systems and protecting the revenue for the company. The capital expenditure is proposed towards acquisition of Meter Data Analytics Software for the above stated purpose.

iii) Metering for Regulatory Compliance requirement

I. Distribution Transformer Metering:

Keeping in view the directions of the Commission, provisions of the Ministry of Power (CEA) (Installation and Operation of Meters) (Amendment) Regulations, 2019 vide Notification dated 17th August, 2021 and The Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021, DT and Feeder metering project was taken up during FY 2022-23. The project will continue through FY2023-24 with an aim to cover metering for 100% DTs having rated capacity of 25 kVA and above. Accordingly, with the aim of driving Energy Audit, the Company has initiated the task of metering all 25 kVA and above Distribution Transformers (DTs) in next one year. Accordingly, metering of approx. 2500 Distribution Transformers (DTs) of capacity 25 kVA and above has been planned for FY2023-24. The overall project comprises of installation and commissioning Energy Meters, LTCTs, Meter Boxes and associated communication devices along with HES application, Software Applications, IT Hardware, Data exchange and integration to fulfil the reporting requirements.

The Company has projected to incur an amount of Rs. 105.23 Crore towards CAPEX on New Connections, Replacement Stock & Metering which will be undertaken in different time frame and at different locations during FY 2023-24. The Petitioner further emphasis that none of the abovementioned CAPEX will exceed Rs. 10 Crore and therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

B. Distribution System Schemes:

Based on the above estimated load, schemes have been prepared to cater to energy requirement and peak demand of various load centres.

i) 33/11 kV Substation:

The Petitioner has planned to refurbish the 33/11 kV Substation cum Switching Station in Greater Noida area at following locations to manage the increasing demand of load for upcoming consumers in the area in FY 2023-24.

Refurbishment of 33/11kV Substation at Surajpur South to 33kV Switching cum 33/11kV Substation with AIS switchboard:

The Petitioner constructed 33/11kV Outdoor AIS type Substation at this location to cater the load of nearby area in FY 1996-97. With time, the condition of substation control room building has deteriorated as the same is almost 26 years old and the installed switchgears have also been outdated and obsolete from the market. Further, the availability of spares for routine O&M is also getting tough and hard to find. Implementation of Substation Automation and SCADA is also a big concern as the devices are not compatible for smart communication & data transfer over real time. Further, as the nearby industrial area has also developed and grown, there is requirement of a switching substation to manage the load at 33kV voltage level apart from catering to 11kV consumers. To refurbish the existing 33/11kV Substation and associated civil building, upgrade it to Indoor type AIS 33/11kV Substation cum Switching Station and to cater the load of new and existing 33kV consumers in vicinity of the substation. Old installed 33/11kV 5 MVA Power Transformers shall be re-utilized.

The brief electrical configuration of the Substation will be as follows:

a) 33 kV: 2 No's Incomer+ 1 No. Bus Coupler cum Adapter Panel+ 2 No's Transformer Feeder Outgoings + 2 No's Feeder Outgoings with Indoor Type AIS Switchgear.

b) 11 kV: 2 No's Incomer + 1 Bus Coupler+ 1 Adapter+ 8 No's Feeder Outgoings with Indoor Type AIS Switchgear.

c) 33/11kV: Old existing 5 MVA Power Transformers shall be re-instated with provision of NIFPES (Nitrogen Injection Fire Protection & Extinguishing system).

   The refurbish substation will benefit the existing and new 33kV consumers utilizing the proposed 33kV switches and shall reduce the length and loading of 11kV feeders emanating from other nearby substations, creating N-1 redundancy and enhancing the reliability indices for the existing and future consumers. Further, it shall also accommodate the upcoming load growth of area in vicinity.

ii) Construction of 33 kV Network

Under this scheme, the Petitioner shall be laying 33kV 3Cx400 sq.mm cable for interconnection between Switching Substations and feeder evacuation through new and existing Switching Stations. Further, for execution of network improvement schemes, the Company shall lay approximately 15kms for both Zone-1 & Zone-2.

iii) Construction of 11 kV

The Petitioner submitted that with the construction of 33/11 kV Substations at various load centres, it is proposed to lay new 11 kV feeders to cater to load requirement of Urban/Industrial/Village consumers. The new feeders shall alleviate the power burden on existing 11 kV feeders and will also be available to meet load during breakdowns of adjacent 11 kV network. For high load density area, we are proposing distribution transformer installation on joist structure for proper load management. Further, the increase in demand of load necessitates transformation of voltage level from 11 kV to 0.4 kV in order to cater to the demand. Hence, Distribution Transformers need to be added in the circuit in order to fulfil the increasing load requirement of the consumers. Also due to rapid urbanization of the village areas in Greater Noida, number of colonies surrounding the village area are getting added on regular basis. The new feeders would relieve the existing 11kV feeders and would also be available to meet load during breakdowns of adjacent 11kV network and will also strengthen the power carrying capacity.

iv) Construction of LT Network

In course of time, it has been observed that due to inadequate planning and design, the existing distribution network of the urban sectors developed by GNIDA is prone to breakdown as well as incapable of catering to the increasing load of the urban households. GNIDA and UPSIDA are developing industrial area for MSMEs, which requires LT load. Keeping in view the above situation, the Petitioner has envisaged strengthening of the existing network by practicing proper load balancing as well as by creating ring main arrangement between Feeder Pillars and at the same time augmenting the distribution capacity of the existing network. The Company also strives to cater to the increasing consumer base by putting up load centered distribution transformer sources, subsequent underground LT network to achieve optimal loading of the network, high degree of voltage regulation, improved reliability of supply in terms of reduction in system downtime during breakdown. Further, to facilitate the above mentioned arrangements, capex is being proposed on account of LT Network Development, which involves installation of feeder pillars, LT panels, laying of LT underground cables etc.

v) Network safety related work

The capital expenditure is proposed for network renovation like fencing of isolators/transformers, installation of NIFPES for providing fire protection to Power Transformers. The Company has projected to incur the amount towards CAPEX aggregating to Rs. 72.58 Crore on Distribution System Scheme which will be undertaken in different time frame and at different locations during FY 2023-

24. In view of above, the Commission may appreciate that none of the abovementioned CAPEX will be exceeding Rs. 10 Crore and therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

C. Loss Control Activities:

The Commission vide its Business Plan Order dated November 22, 2022 has approved the T&D Losses of the Company at 7.63%. Thus, in order to comply the directions of the Commission, the Company will require capex to achieve the T&D Losses as prescribed and proposed the following Capex on account of Loss Reduction Activities. To brief, NPCL serves in 118 villages in its licence area. Despite various difficulties and constrains the Company continues to maintain lowest T&D loss in the state of UP, which is one of the best in India. NPCL submits that theft of electricity is the main contributor to such loss. NPCL operate their loss control activity in a hostile environment where stiff opposition from miscreants, physical violence and continuous threats to our staff are on the rise. The Company has been facing challenges to reduce T&D Losses through various means such as (i) illegal hooking by damaging Distribution Box, (ii) theft of electricity by meter tampering (iii) Meter bypass, (iv) Tampered Service cables, (v) theft of electricity by puncturing ABC cable in rural areas etc. To curb theft from LT network and meter, below mentioned network improvement initiative has been planned in 16 nos of Rural 11 KV feeders under loss reduction Capex estimated at Rs 8.86 Crore for FY 2023-24:

1) LT ABC to Armoured network cable replacement:

In dense rural streets, it is very prominent to steal power by tamper LT ABC or inserting nails on LT ABC network cable and connect illegal wires for whole day or specially in night time. Earlier laid LT ABC networks in rural street has been damaged in various places. For remedial action, LT ABC network cable will be replaced with armored cable of suitable size which is hard to tamper or insert nails.

2) Pole Replacement:

In rural area in the dense streets PCC LT poles are easily accessible by consumer from roof top. During inspection it is observed that LT network has been tamper at pole and illegal wire is connected or provision has been made to connect illegal wire in night time. In some location poles are found tilted and bent. Trough capex of FY 2023-24, conventional PCC pole will be replaced by STP pole to cater load of armoured cable and distance from approach of consumers. Other than reducing theft, illegal restoration of supply by temporary disconnected consumer will also be reduced. To curb power theft by damaging meter, meter accessories and network assets, it is required to implement above mentioned network improvement initiatives. To meet above mentioned network imprudent initiatives substantial investment are required. These initiatives will also safe-guard consumers interest for noble consumers. This will enhance the reliability, reduction in T&D losses, safe environment, meeting new load requirement and efficiency improvement along with customer satisfaction.

3) **Meter Shifting from inside to outside:**

   In rural area, most of the consumer's meters are installed inside premises. Arrangements has been made by consumers in meter terminal to bypass supply of meter. To inspect and collect evidence, inspection team has to knock and enter inside premises. During inspection consumer easily suppress the evidence and then allow team for inspection. Even sometime do not allow team to inspection inside premises. To cater this problem, meter needs to shift from inside of premises to outside at visible location so that inspection team can easily inspect if there are any tampering with meter or meter bypass at terminal. It will also help in meter reading as meter reader don't have to enter premises and reading of meter is accessible even premises is locked.

4) **Meter inside push-fit box:**

   In the conventional box, it gets open at ease and consumers may bypass meters at odd hours or in the absence of inspection team. Push-fit box needs to be broken completely to access meter terminal or meter. In place of conventional meter box, push-fit type meter box will be used.

5) **Service cable optimization:**

   Service cable laid over roof or balcony of consumer or concealed inside wall of consumer in rural area, there are theft cases identified as service cable has been tampered and supply is being used illegally. To reduce theft in such way, service cable of consumer needs to be replaced with armored cable and from source to meter incoming terminal, service cable will be completely visible. It will be easier for inspection team to detect theft if service cable is tampered.

6) **Replacement of broken of damaged Distribution Box:**

In rural area, there are dense streets in many pockets. Construction of new house and modification of existing premises is in full swing in these 118 villages. There is already narrow street. Earlier laid LT network has cone to proximity of balcony or windows of consumer premises. Distribution box near these premises is being damaged by consumers and used illegal supply from these open or damaged distribution box. To curb power theft from distribution box, the Company shall replace all damaged distribution box with new one and in some very congested places Remote operated anti-theft distribution box will be installed through capex work of FY 2023-24.

The Petitioner has projected to incur the amount towards CAPEX aggregating to Rs. 8.86 Crore on Loss Control Activities which will be undertaken in different time frame and at different locations during FY 2023-24. None of the abovementioned CAPEX will be exceeding Rs. 10 Crore, therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

D. Process System Automation:

i) Substation Automation Works

The Petitioner has implemented SCADA, DMS & OMS system with Master Control Center (MCC) and Backup Control Centre (BCC). In order to enhance consumer experience and better monitoring of Substation and their operational efficiency, it is proposed to install latest technology i.e. IEC 61850 communication protocol along with IEC 104 & MODBUS protocols based Substation Automation System, in line with the emerging technologies & operational requirements. It is proposed to implement the 3 no. new

Substation Automation systems at new substations including upgradation/retrofitting of Control Relay Panel (CRP) at old substation for operations to enable them for remote SCADA monitoring and operations along with upgrading infrastructure for communication with SLDC as per regulatory requirement. Also 5 numbers switching substations at consumer premises and open access HV consumers have been considered for integration in SCADA system respectively by implementing SAS technology during FY 2023-24. Among these 2 numbers strategically selected substations shall be equipped with latest technologies of advanced Building Management System including access control system, fire alarm system, public address system, smart electric fencing, water leak detection system, rodent repellant system, smart UPS and air conditioning system. Thus, the requirement of human supervision will be minimized and to be monitored and controlled from a centralized location. With the onset of smart grid technologies for substations like installation of Transformer Monitoring Unit, Automatic-voltage regulators, Nitrogen Intrusion and Fire Prevention system, wireless CTs, communicable OLTCs, power quality measurement, condition monitoring etc. the necessity for upgrading existing substations and implementation of the same in new substations is may be taken up in FY 2023-24. Further Energy Management and monitoring systems at selected substations and offices shall be taken up in FY 2023-24.

ii) SCADA, DMS, OMS enhancement: Development, Scalability & Integration activities on SCADA, DMS, OMS system with new platforms Automation Software and Control Room works

The functionalities covered through DMS are Network Connectivity Analysis (NCA), Operation Monitor (OM), Voltage VAR control (VVC), Load Shed Application (LSA), Fault Localization, Isolation and System Restoration (FLISR), Load Flow Application (LFA), Unbalanced Load flow, Time Domain Load flow, Switching Sequence Management , State Estimation etc. The functionalities covered through OMS helps to restore the supply more speedily, provide better consumer services, managing breakdown resources both vehicle and manpower more scientifically etc. Broadly OMS system interacts with Customer

Relationship Management System (CRM), Interactive Voice Response System (IVR), GIS System, SCADA System and DMS System. It has features such as Crew management, Upstream fault node prediction in case of group outages etc. and thus enabling the company to render better consumer services through restoration of supply outages scientifically and speedily. For churning out more useful information from the deployed platform of SCADA, DMS and OMS, enhancement through Data Analytics initiatives are proposed to create data interface with SCADA, DMS, and OMS at appropriate deployment stage of such technologies. Enhancement and upgradation of existing ADMS infrastructure including renewal/addition of further licenses are also planned in FY 2023-24, when support from OEM will be concluded. As per recommendations outlined in security roadmap for the organization the activities like regular vulnerability assessment and review of automation network, security strengthening, OS / software patching and updates, performing penetration testing, implementing intrusion detection and prevention systems for OT are considered. In FY 2023-24, this will be further strengthened via deployment of latest cybersecurity tools as per the requirement.

iii) Implementation of BMS, OMS Facility and Smart Grid Lab

The company has successfully setup a Master Control Center (MCC) with full-fledged SCADA, DMS & OMS system which operates on 24x7 basis and performs real time data monitoring, operation & control and decision-making facility through control room engineer. Further, existing substations will be upgraded with building management functions of fire alarm detection system for better remote monitoring and management of fire incident at substations. In FY 2023-24, 5 no. substations will be taken up for deployment of FAS systems. Also, other locations like warehouses, new customer cell shall also be considered for BMS upgradation with 1 location proposed in FY 2023-24. Existing Smart grid lab is also proposed to be upgraded to accommodate demo environment for more industry 4.0 technologies in FY 2023-24.

iv) Upgradation /strengthening of Communication System

The Company has deployed its own communication system for data and voice system between various offices and from Substations to ensure independent and secured flow of data. Optical fiber is used as main as well as ring communication network amongst all 33/11kV Substations & Company's offices. NMS (Network Management Software) is used to monitor healthiness of fiber & reports are generated and delivered via e-mail. The technological evaluation and better connectivity uptime warrant to have a hybrid technological system and therefore other mediums may also be implemented. The Company shall continuously provide the connectivity for all new requirements in commensuration with network, office space and other field automation related activities. With a vision to expand the horizon of securing, automating and controlling the electrical network in the downstream network from substations for a reliable, safe, fast and centralized decision-making; the pocket substations in the downstream distribution network are proposed to be connected with existing OFC communication network of the company. The company's existing OFC infrastructure is proposed to be extended further to 15 no. pocket substations in FY 2023-24.

v) **Network Automation**

The emerging and tested technologies like communicable Fault Passage Indicators, Automation of Ring Main Unit by making it communicable, auto-recloser, sectionalized & load break switch are planned to be implemented to ensure improvement in supply reliability & this will also be integrated in SCADA, DMS & OMS platform. This leads to minimum downtime & easy identification of fault & fault location which result in minimum restoration time. The electrification in all the areas is growing constantly so as the number of 11kV RMUs are increasing at distribution level. It is required that these RMUs should be controlled & monitored from the control center. RMU automation with FPI (Fault Passage Indicator) & C.B. / Load break switch status monitoring from remote station has been started using GPRS based Feeder remote terminal units (FRTUs) and the same shall continue with automation of 40 no. RMUs for better network monitoring, management, supply restoration and thus enabling to serve consumers with more efficacy. Also new communication technologies for wireless communication of RMU with SCADA will be explored and deployed as a better alternative to existing GPRS network.

vi) Smart Grid Initiatives

As a part of ongoing Smart-Grid initiatives, a demand-response platform is planned to be implemented in FY 2023-24 to engage consumers in optimizing the Demand vs Actual load gap via introducing an innovative and feasible scheme for consumers to encourage them shed their non-critical loads during peak load hours abided through a viable contract. In continuation to previous financial year, it is further proposed to integrate real time generation data of renewable energy sources within the company licensed landscape to help in better estimation of load planning. In FY 2023-24, additional 10 number of sites will be integrated with SCADA system. In the same context, consumers with high loads i.e., in MW shall also be monitored under SCADA to capture the real time deviations and schedule the demand accordingly. An additional 10 number consumers shall be integrated to SCADA in FY 2023-24. Internet of Things is also the territory where Company aspires to adopt the technology in creating a canopy for monitoring of large volume of elements in power distribution network like LT switchgears, distribution transformers, feeder pillars etc. The Company has planned phase wise deployment on the same based on successful evaluation of PoCs in FY 2023-24.

vii) Business Continuity of GIS and associated Processes

In view of increasing consumer base, New survey equipment may be required for field data collection and Physical Asset verification in FY 2023-24. Rugged devices are purpose-built to make work processes easier. By allowing staff real-time access to data, great connectivity options, and durability through robust build and design, operations become more efficient across a multitude of work roles and functions. A procurement of Rugged mobile devices for a Mobile Enterprise Solution is proposed in FY 2023-24 for Implementation of Mobile solution in the field with visualization of GIS Maps and data in the field in the digital form. Implementation of Mobile Enterprise Suite software is proposed in FY 2023-24 for providing the superior quality service, be more productive, and allow team members to upload, access, and share critical information through their hand-held devices, ensuring real-time data on the go, without necessitating extra expenditure, while ensuring they stay informed throughout. Utilities are in constant search of technological innovations designed to increase grid uptime and reduce outages. Drones with advanced Thermal, or infrared sensors have great potential in the power utility industry. A Drone with advanced sensors procurement is proposed in FY 2023-24 with the use case to monitor the hot spot faults. It will also assists in judging the status of powerline equipment, and help powerline operation and maintenance from traditional "regular maintenance" and "fault maintenance" to "predictive". "Overhaul" to improve the stability and reliability of the power supply. Digital image data processing is mainly to input digital image data into a high-end workstation to complete the conversion of a continuous spatially distributed image model into a discrete digital model so that the computer can identify, process, and store the digital image information. A Specialized Work Station procurement is proposed in FY 2023-24. Existing old vehicle tracking system (VTS) is scrapped as these reached their end use life hence new VTS installation in the vehicles are required for tracking of vehicles is proposed in FY 2023-24. Future new installations for new company-purchased vehicles are required which will be done in FY 2023-24. 3D computer-assisted modelling or graphics work commonly designates one super-powerful workstation for the heavy lifting phases of design. Early design stages can have a lot of iterations, so being able to handle 3D modelling, rendering, and drafting on a development PC is key. Specified laptops for Virtual Reality (VR) and Augmented Reality (AR) procurement are proposed in FY 2023-24. To improve the performance and provide additional functions to the existing deployed VR Software, an enhancement is proposed in FY 2023-24.

viii) New Initiatives in GIS

Apart from the above-mentioned facilities, to cope-up with the existing technological advancements, Implementation of Augmented Reality Technology is proposed in FY 2023-24. It is very much required for capacity building of the existing and new joiners. Also, facilitates the training requirement more efficiently.

ix) Implementation of CCTV based Surveillance System

The Company has deployed its own CCTV based surveillance system for real time asset monitoring at various offices and from Substations to ensure safety of all assets, undue infringement by any unknown external or internal personnel on restricted area where critical installations of utility are placed such as Substation yards, control panel room, IT data centers, billing and customer care etc. The company is continuously engaged in covering entire distribution area covered under 24X7 surveillance. Therefore, company has considered 3 new substation locations in FY 2023-24. Also, with the objective to extend the surveillance coverage till pocket substations, it is proposed to cover additional 15 no pocket substations in FY 2023-24. The Company has projected to incur the amount towards CAPEX aggregating to Rs. 15.95 Crore on Process / System Automation which will be undertaken in different time frame and at different locations during FY 2023-24. None of the abovementioned CAPEX will be exceeding Rs. 10 Crore and therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

E. Civil Works and Office Infrastructure Facility:

The civil work shall be required for the refurbishment of 33/11 kV Substation, Boundary walls of 11/0.415 kV Pocket Substation and other Office Infrastructure facilities. The Company proposes the following works for FY 2023-24.

i) Refurbishment work of Substation and Control Room Building, Power Transformer Yard, HT & LT Cable Trenches and Boundary Wall with Guard Room at existing 33/11kV Substation at Surajpur South.

ii) Construction of Boundary walls of 11/0.415 kV Pocket Substations handed over by GNIDA for asset and public safety.

iii) Construction of Scrap Yard Shed at Site C Area for storage of scrap materials.

It is expected that most of the planned works shall be completed within that fiscal. However, actual execution is dependent on various external factors such as availability of land, availability of right of way for the proposed distribution lines, availability of transmission capacity from UPPTCL along with pending legal issues etc. The Company has projected to incur the amount towards CAPEX aggregating to Rs. 6.95 Cr. on Civil Works and Office Infrastructure which will be undertaken in different time frame and at different locations during FY 2023-24. None of the abovementioned CAPEX will be exceeding Rs. 10 Crore and therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

F. IT Projects

The Company proposes following Capex under the various heads of IT Projects:

i) Implementation of Software Applications

A number of applications within SAP S/4HANA including S/4HANA Utilities have to be enhanced in FY 2023-24 to provide better support to customers and improve performance of business processes running on S/4HANA. New business requirements involving technologies other than SAP S/4HANA will also be taken up for implementation to enhance efficiency of processes. Implementation related to cyber security solutions is also planned for safeguarding of our network, devices and data.

ii) Upgrading of Hardware Infrastructure Capacity

To accommodate growing requirements of computing and memory resources as well as storage, Hyper Converged infrastructure will be further augmented. Purchase of new UPS systems to support installations in Offices / Substations is also planned.

iii) Upgrading of Networking Infrastructure

Additions to the networking infrastructure are planned on account of commissioning of new Substations. Provision has also been kept to replace the Wi-Fi Access Points at offices on account of obsolescence of products.

iv) Purchase of Computers, Peripherals & Accessories

Purchase of new computers, mobiles and other peripherals have been planned to meet increasing computing requirements as well as to replace obsolete devices.

v) Purchase of Software Licenses

Purchase of licenses of new software such as SAP, Microsoft, Manage Engine Central, etc. will be made as per requirement to meet the growing computing needs of users as well as in the Data Centre.

The Company has projected to incur the amount towards CAPEX aggregating to Rs. 9.42 Cr. on IT Projects which will be undertaken in different time frame and at different locations during FY 2023-24 and none of the abovementioned CAPEX will be exceeding Rs. 10 Crore and therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

G. Tools and Testing Equipment

In its endeavour for continuous improvement / modification / upgradation in the current O&M practices / activities, the Company through introduction of cutting-edge technology in Testing & Maintenance Equipment encourages & ensures occupational safety of the personnel. It is facilitated through replacement of existing worn out tools, safety equipment and Meter reading instruments in line with the best O&M practices prevailing across various sectors.

i) Meter Testing Equipment

Meter testing equipment like LT Accucheck, HT Accucheck, Primary Injection kit and associated equipment are part of day-to-day activities in order to attend to consumers' meter testing request and ensure healthy operational practices within the organization. Accordingly, various testing equipment and associated components are proposed to be procured to meet the requirement. Better testing practices shall facilitate consumer satisfaction by ensuring timely resolution of consumer complaints.

ii) Transformer and Testing Equipment & Safety Equipment

In FY 2023-24, Procurement of the following Testing Equipment's are proposed.

i) **One dedicated LT Fault Locating Van to cater to extensive LT underground network for Pin-pointing fault of LT underground cable.**

ii) **Combined Substation Testing Kit, Thermal Imager for divisional team, SF6 Gas leakage Detector, Multimeter, LLD, Safety Shoe, helmet are proposed to be procured**.

These testing instruments are used for testing & healthiness check of LT cable, substation equipment's CT, PT, Switchgear & Transformers and safety of employee & workers.

iii) Meter Test Bench

Meter test bench is an essential requirement for any utility to provide meter testing facilities for both internal requirement of meter testing as well for the utility consumers. The purpose is to provide facilities for doing routine, acceptance and certification test (error test and dial test) on 1 phase, 3 phase whole current, 3 phase CT/PT operated Energy meters. The Meter Test Bench shall also be equipped with testing requirements of Smart Meters to address the testing requirements of new generation of meters. Accordingly, the capital expenditure is proposed towards acquisition of new Meter Test Bench.

iv) HT Testing & Training Lab

The capital expenditure is proposed to establish an HT Testing & Training Facility with a view to have in-house testing facility for HT Metering system including Energy Meter & instrument transformers for internal testing purposes as well as for carrying out testing as per consumer request. The facility is envisaged to have testing and training facilities for Engineers' and staff to keep them updated with latest technological development and to maintain high standard of service quality to the consumers.

v) Arial Truck/Mobile & Elevated Work Platform

In view of enhancing safety of breakdown team personnel, it has been proposed to procure 1 no. of Mobile Elevating Work Platform. These platforms are equipped with Boom and Bucket platform, which ensure trouble free operation for the breakdown repair personnel in case of overhead line faults. They shall also be useful in trimming of extended branches of trees, which often lead to line faults.

The Company has projected to incur the amount towards CAPEX aggregating to Rs. 3.37 Cr. on Tools & Testing Equipment which will be undertaken in different time frame and at different locations during FY 2023-24 and none of the abovementioned CAPEX will be exceeding Rs. 10 Crore and therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

H. Vehicles

a) The Petitioner submitted that it is required to provide vehicles to its officers/ staff for various official work including loss control drives, field duties i.e. visiting Substations, transporting heavy materials etc., shift-based duties in call centre, control room etc. and inter office movement to provide 24X7 reliable power supply in its licensed area and many other office related assignments including attending meetings/ court proceedings/ inspection of materials / vendor-verifications etc. in NCR and nearby States. The provision of vehicles not only ensures efficient and prompt services in economical manner but also necessary to ensure safety of its employees being working even in the odd-hours / night time. The Hon'ble Commission will appreciate that no power distribution utility can work without vehicles which are as basic & necessary as furniture, office equipment such as computers, printers etc.

b) The vehicles are essential for smooth movement of company's officials for efficiently providing services to the consumers in the licensed area which is spread over 335 Sq. Kms and the distance from east to west ranges from 45 – 50 Kms approx. The vehicles are purchased after detailed evaluation of the requirements and as per the policy of the Company. It is submitted that such requirement comprises of replacement of old and inefficient vehicles as well as new requirement to service the fast-increasing load as well as consumer base of the Company in the most economical and efficient manner.

c) The Commission may please appreciate that without the vehicles, the consumers of the licensed area of the Company cannot be served efficiently which will ultimate result in poor services to the consumers and the same will be against the interest of consumers.

The Petitioner has projected to incur the amount towards CAPEX aggregating to Rs. 3.49 Crore on Vehicles which will be undertaken in different time frame and at different locations during FY 2023-24 and none of the above-mentioned

CAPEX will be exceeding Rs. 10 Crore and therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

I. Demand Side Management

The Petitioner has always taken initiatives to meet the demand of consumers by arranging additional network & power. However, at the same time the Company also appreciates DSM techniques to conserve the precious energy & environment. A lot of initiatives have been taken up in this regard by the Company in the previous Control Period, which include Promotion of Roof-top Solar Panels, Solar Water Heater, Energy Saving / Reduction of Electricity Wastage and Distribution of Solar lanterns in rural areas, CFL etc. In FY 2023-24, Company has planned to take new initiatives such as Promotion of Small Solar Plants in Villages, Solar Pumps, Peak Load Management, Energy Storage, Energy Management System Implementation etc. The Petitioner further aims to introduce Demand Response to mid to large segment consumers, which can rapidly create "Megawatts" by curtailing energy usage in a pre-planned way through energy conservation. Curtailments during peak hours without impacting normal operations through carefully designed curtailment programs will be gradually rolled-out across the licensed area. The Company is initially targeting power savings of around 2 to 3 per cent of the peak demand. Electricity theft in the rural areas is one of the major concerns for the Company. The Petitioner is in active discussion with leading consultants and agencies for installation of Roof-top/Ground Mounted Solar Plants in Rural Household Areas. Accordingly, the Petitioner has projected an expenditure of Rs. 1.0 Crore during FY 2023-24 and after preparing the complete plan with cost-benefit analysis, the Petitioner will submit the same to the Commission for its prior-approval. The Petitioner has projected to incur the amount towards CAPEX aggregating to Rs. 1.00 Crore on DSM Activities which will be undertaken in different time frame and at different locations during FY 2023-24 and none of the abovementioned CAPEX will be exceeding Rs. 10 Crore and therefore, the provisions of Regulation 44.2 of the MYT Regulations, 2019 regarding prior approval is not applicable.

6.6.25 Accordingly, based on capex for FY 2023-24 as discussed above, the funding of the aforesaid capital expenditure of Rs. 255.40 Crore and requested the Commission to approve the same as shown below: -

TABLE 6-74: CAPITAL EXPENDITURE FUNDING AS SUBMITTED BY THE PETITIONER FOR FY 2023-24 (RS. CRORE)

Particulars	Ref.	Projected
Addition to GFA	a	314.42
Add: Interest & Salary Capitalisation	b	12.00
Less: Assets Retired	c	11.60
Net Capex	**d=a+b-c**	**314.82**
Consumer Contribution	e	59.42
Capex to be financed	**f=d-e**	**255.40**
Debt - 70%	g=f x 70%	178.78
Equity- 30%	h=f x 30%	76.62

Commission's Analysis

6.6.26 MYT Regulations, 2019 related to Capital expenditure is provided as under:

Quote

18 Capital Expenditure/ Cost and Capital Structure

18.1 Capital cost for a capital investment Project shall include:

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, as admitted by the Commission after prudence check;

(b) capitalised initial spares subject to the ceiling rates stipulated in these Regulations;

(c) expenses incurred by the Licensee on obtaining right of way, as admitted by the Commission after prudence check;

(d) additional capital expenditure determined under Regulation 19;

(e) Incidental expenditure during construction including apportioned expenditure on relevant components of O&M:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost;

(f) any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed up to the date of commercial operation, as admitted by the Commission after prudence check:

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19 Additional Capitalisation

19.1 The capital expenditure, actually incurred or projected to be incurred, on the following counts within the original scope of work, after the date of *commercial operation and up to the cut-off date, may be admitted by the Commission subject to prudence check:*

(i) Undischarged liabilities recognized to be payable at a future date;

(ii) Works deferred for execution;

(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 18;

(iv) Liabilities to meet award of arbitration or for compliance of the Order or decree of a court of law; and

(v) Change in law or compliance of any existing law

Provided that the details of works included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the Petition for determination of final Tariff after the date of commercial operation.

19.2 The capital expenditure, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the Order or decree of a court of law;

(ii) Change in law or compliance of any existing law;

(iii) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments, etc.;

(iv) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;

(v) Any additional capital expenditure which has become necessary for efficient operation

Provided that the claim shall be substantiated with the technical justification duly supported by documentary evidence like test results carried out by an independent agency in case of deterioration of assets, damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;

(vi) Any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, batteries, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, which has become necessary for successful and efficient operation of Transmission System; and

(vii) Any capital expenditure found justified after prudence check necessitated on account of modifications required:

Provided that any expenditure, which has been claimed under Renovation and Modernisation or repairs and maintenance under O&M expenses, shall not be claimed under Additional Capitalisation.

19.3 Impact of additional capitalisation on Tariff, if any, shall be considered during Tariff determination proceedings.

……

44 Capital Investment Plan

44.1 The Distribution Licensee shall submit a detailed Capital Investment Plan, financing plan and physical targets for each year of the Control Period for meeting the requirement of growth in number of consumers, strengthening and augmentation of its distribution network, meeting the requirement of load growth, reduction in distribution losses, improvement in quality of supply, reliability, metering, reduction in congestion, etc., to the Commission for approval, as a part of the Business Plan:

Provided that in case of non-submission of the Capital Investment plan by the Distribution Licensee for a year of the Control Period, the Commission may disallow the Capital expenditure for that year.

44.2 The Capital Investment Plan shall be a least cost plan for undertaking investments. However, all capital expenditure projects of value exceeding Rs. Ten Crore and must have prior approval of the Commission on quarterly basis, and will be subject to prudence check.

44.3 The Capital Investment Plan shall be accompanied by such information, particulars and documents as may be required including but not limited to the information such as number of distribution sub-stations, consumer sub-stations, transformation capacity in MVA and details of distribution transformers of different capacities, HT:LT ratio as well as distribution line length showing the need for the proposed investments, alternatives considered, cost / benefit analysis and other aspects that may have a bearing on the Tariff for retail supply of electricity and the Wheeling Charges:

Provided that the Distribution Licensee shall submit separate details of Capital Investment Plan for each Distribution Franchisee area within its Licensee area.

Unquote

6.6.27 The Commission vide deficiency dated January 06, 2023 directed the Petitioner to confirm that it has not claimed any Capital expenditure / additional capitalisation for any 132 / 220 kV assets in the Petition in FY 2023-24. In response to the Commission's query, the Petitioner confirmed it has not incurred / claimed any Capital expenditure / additional capitalisation for FY 2023-24 for any 132 / 220 kV assets other than funded by Consumer Contribution.

6.6.28 The Commission observed that the Petitioner has projected a significant increase in the capitalization for FY 2023-24, as compared to previous years in this regard the Commission vide deficiency dated January 06, 2023 directed the Petitioner to provide the reason for the same and also to provide the details of distribution capacity (MVA) and distribution network (ckt. km) addition. In response, the Petitioner submitted that it has proposed Capex of Rs. 326.42 Crore for FY 2023-24 and divided into two parts i.e. Capital Expenditure Project of value exceeding Rs. 10 Crore and below Rs. 10 Crore as shown below: -

TABLE 6-75: TOTAL CAPITAL EXPENDITURE FOR FY 2023-24 (RS. CRORE)

Sl. No.	Nature of Works	Estimated
1	Capital Expenditure Projects of value exceeding Rs. 10 Crore	100.88
2	Capital Expenditure Projects of value not exceeding Rs. 10 Crore	213.54
3	**Subtotal**	**314.42**
4	Add: Salary Capitalisation	12.00
5	**Total**	**326.42**
6	Less: Consumer Contribution	(59.42)
7	Less: Asset Retirement	(11.60)
8	**Net Capital Expenditure**	**255.40**

6.6.29 The Petitioner proposed two new projects for CAPEX exceeding value of Rs. 10 Crores, amounting total Rs. 100.88 Crore details of these two projects are as follows:

a. Investments to Build Cyber Resilience (Rs. 13.54 Crore)

To meet the requirements of CEA (Cyber Security in Power Sector) Guidelines, 2021, Directions dated April 28, 2022 from CERT-In of Ministry of Electronic and Information Technology under sub-section (6) of section 70B of the Information Technology Act, 2000 as well as other requirements issued by CEA, CERT-In and NCIIPC as well as to upgrade the readiness of the organization to deal with cybersecurity-related risks, the Petitioner is undertaking steps to improve defenses for the threats and build cyber resilience. For FY 2023-24, this includes proposal for deployment of Managed Detection and Response (MDR) system to counteract threats such as ransomware and implementation of a Security Information and Event Management (SIEM) software to collate and correlate logs retrieved from all vulnerable devices so that actions can be taken to mitigate risks and eliminate threats.

b. Power Evacuation from new / upcoming 220 kV & 132 kV Substations being constructed at Greater Noida during FY 2023-24 (Rs. 87.33 Cr. during FY 2023-24)

To meet the present and future load demand of the Greater Noida, The Petitioner is developing the four (4) No's of new Grid Substations by Uttar Pradesh Power Transmission Corporation Limited ("UPPTCL") under the deposit scheme of Greater Noida Industrial Development Authority ("GNIDA") in the Greater Noida. Therefore, the Company has applied for the connectivity and already received the "Intimation for Grant of Connectivity" from UPPTCL from the aforementioned Grid Substations. Since, these Grid Substations are scheduled to be commissioned in 1st / 2nd / 3rd Quarter of FY 2023-24, therefore it has proposed the abovementioned Power Evacuation Plan at 33 kV voltage level from each Grid Substations spanning FY 2023-24 & FY 2024-25 for timely evacuation of power.

6.6.30 The Petitioner submitted that the aforesaid schemes, which are Power Evacuation from new / upcoming 220 kV & 132 kV Substations being constructed by UPPTCL at Greater Noida during FY 2023-24 and Investments to Build Cyber Resilience, has already been filed before the Commission for the approval of the Capital Expenditure vide Petition no. 1950/2023 on January 06, 2023 and Petition no. 1927 of 2022 on December 19, 2022 respectively. The Commission is currently conducting due diligence and prudence for the aforesaid schemes and consider the proposed Capital Expenditures of Rs. 87.33 Crore towards power evacuation plan. However, at the time of True up Capital Expenditure towards the proposed schemes shall be dealt as per the factual situation and the relevant Order issued by the Commission.

Other Capital Expenditure:

6.6.31 The Petitioner submitted that except aforesaid two projects, the balance CAPEX of Rs. 213.54 Crore comprising of projects less than Rs. 10 Crore, are in the nature of routine CAPEX required by the Petitioner for developing and augmenting the Distribution Network and supporting facilities of the Petitioner to meet its service obligation as defined in Code no. 4.1 and 4.2 of UP Electricity Supply Code, 2005 and also to meet growth in demand of electricity from its existing and future consumers.

TABLE 6-76: SUMMARY OF YEAR-WISE CAPEX (RS. CRORE)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	Actual	Actual	Actual	Estimated	Projected
Capital Expenditure Projects of value not exceeding Rs. 10 Cr.	208.67	100.19	199.16	179.05	213.54
Salary Capitalisation	Included Above	Included Above	Included Above	10.00	12.00
Total Capex	**208.67**	**100.19**	**199.16**	**189.05**	**225.54**
Less: Consumer Contribution	24.65	19.97	78.79	36.24	59.42
Net Capex	**184.02**	**80.22**	**120.37**	**152.81**	**166.12**

6.6.32 The Petitioner further submitted below table as per the format prescribed by the Commission with respect to Capex:

TABLE 6-77: SUMMARY OF CAPACITY ADDITION (MVA)

Particulars	FY 2019-20 (Actual)	FY 2020-21 (Actual)	FY 2021-22 (Actual)	FY 2022-23 (Estimated)	FY 2023-24 (Projected)
Opening	643	685	682	709	730
Addition during the year	26	25	27	28	30
Withdrawal from service	11	1	0	7	4
Closing	658	682	709	730	757

TABLE 6-78: DISTRIBUTION NETWORK LENGTH (ckt. km.)

Particulars	FY 2019-20 (Actual)	FY 2020-21 (Actual)	FY 2021-22 (Actual)	FY 2022-23 (Estimated)	FY 2023-24 (Projected)
33 kV					
Opening	783	860	1,017	1,104	1,136
Addition during the year	82	158	88	35	73
Withdrawal from service	5	1	1	3	4
Closing	860	1,017	1,104	1,136	1,205

Particulars	FY 2019-20 (Actual)	FY 2020-21 (Actual)	FY 2021-22 (Actual)	FY 2022-23 (Estimated)	FY 2023-24 (Projected)
11 kV					
Opening	2,398	2,500	2,618	2,711	2,746
Addition during the year	107	121	107	52	64
Withdrawal from service	5	3	14	17	18
Closing	2,500	2,618	2,711	2,746	2,792
LT					
Opening	3,092	3,215	3,302	3,419	3,481
Addition during the year	126	95	132	87	110
Withdrawal from service	3	8	14	25	30
Closing	3,215	3,302	3,419	3,481	3,561

6.6.33 The Commission observed that the number of consumers and connected load claimed for FY 2023-24 has increased with 57.78% and 40.13% respectively as compared to claimed by the Petitioner in FY 2020-21, whereas capex (NPCL asset) claimed for FY 2023-24 has increased with 281.02% as compared to claimed value of FY 2020-21. In this regard the Commission vide deficiency dated January 06 2023 sought clarification from the Petitioner. In response to the query the Petitioner requested the Commission to consider the capital expenditure with growth parameters as mentioned below: -

TABLE 6-79: CAPITAL EXPENDITURE WITH GROWTH PARAMETERS

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	% increase in FY 2023-24 as compared to FY 2022-23
Capex claimed by the Petitioner (Rs. Cr.)	**97.13**	**188.72**	**178.30**	**314.82**	**76.57%**
Capital Expenditure Projects of value exceeding Rs. 10 Crore (Rs. Cr.)	-	-	-	100.88	-
Routine Capex claimed (Rs. Cr.)	97.13	188.72	178.30	213.94	19.99%
NPCL Asset (Rs. Cr.)	77.16	109.93	142.06	154.52	8.77%
Consumer Contribution (Rs. Cr.)	19.97	78.79	36.24	59.42	63.96%
Number of Consumers (Nos.)	1,06,707	1,17,753	1,38,840	1,68,359	21.26%
Connected Load (MW)	1,146.58	1,250.23	1,426.62	1,606.75	12.63%

6.6.34 The Petitioner further submitted that in FY 2020-21 was impacted by lockdown due to COVID-19 pandemic and the Petitioner could not make the capex as planned, therefore, it will not be appropriate to compare the proposed Capex of FY 2023-24 with FY 2020-21. In the revised submission in reply as mentioned above, the

Petitioner has compared the capex proposed in FY 2023-24 with estimated value for FY 2022-23. The Petitioner submitted that its routine capital expenditure proposed is Rs. 213.54 Crore, after excluding the projects of Rs. 100.88 Crore, is comparable with capex estimated for FY 2022-23 and is in line with the increase in connected load and number of consumers.

6.6.35 The Commission vide deficiency dated January 06, 2023 sought from the Petitioner the basis for projection of Consumer Contribution / Deposit, Works / Capital Subsidies / Grants etc. of Rs. 59.42 Crore for FY 2022-23. In reply the Petitioner submitted the following table:

TABLE 6-80: COMPUTATION OF CONSUMER CONTRIBUTION

Consumer Category	Line Charges Per Connection			Estimated New Consumer	Estimated Consumer Contribution	Estimated New Consumer	Estimated Consumer Contribution
	Overhead	Underground	Average	FY 2022-23		FY 2023-24	
	Rs.	Rs.	Rs.	No.	Rs. Cr.	No.	Rs. Cr.
132 kV / 220 kV	**As per Actual**	**As per Actual**	**As per Actual**	-	-	1	1.65
33kV Large Consumer	**As per Actual**	**As per Actual**	**As per Actual**	2	10.00	4	20.00
33 kV	5,72,970	8,39,800	7,06,385	15	1.06	15	1.06
11 kV	2,27,480	2,72,020	2,49,750	150	3.75	170	4.25
LTCT with transformer	24,015	26,655	25,335	130	0.33	150	0.38
3 Phase LT (Urban/Industry/Commercial)	15,607	17,003	16,305	1,600	2.61	1,800	2.93
Single Phase LT (Urban/Commercial)	3,520	4,359	3,940	2,500	0.98	2,800	1.10
3 Phase LT (Village)	15,607	17,003	16,305	500	0.82	600	0.98
Single Phase LT (Village)	2,922	-	2,922	4,500	1.31	5,500	1.61
Single Phase Prepaid Meter	2,922	-	2,922	400	0.12	600	0.18
Three Phase Prepaid Meter	2,922	-	2,922	150	0.04	300	0.09
Conversion of Single point to Multipoint	-	12,475	12,475	4,000	4.99	4,000	4.99
New Societies Individual Connection	-	12,475	12,475	7,000	8.73	15,000	18.71
Meter & CT Replacement etc.	-	-	-		1.50		1.50
Total	-	-	-	**20,947**	**36.24**	**30,940**	**59.42**

6.6.36 Further, the Commission vide deficiency dated January 06, 2023 sought break-up of Capex claimed / approved for FY 2023-24 and in compliance the Petitioner submitted the following table:

TABLE 6-81: CAPEX SUBMITTED BY PETITIONER

Sl. No.	Particulars	FY 2023-24	
		Approved	Projected
1	Capex required for expansion/ new connection/network growth	NA	270.87
2	Capex required for loss reduction		8.86
3	Capex required for any other work with details		46.69
	Total	**NA**	**326.42**

6.6.37 The Commission observed that the Petitioner has also proposed a Capital Expenditure of Rs. 3.49 Crore towards vehicles and Rs. 8.15 Crore towards Land. In rationalization the above said expenses, the Petitioner submitted that they are required to provide vehicles to its officers / staff for various official work including loss control drives, field duties i.e. visiting Substations, transporting heavy materials etc., shift-based duties in call centre, control room etc. and inter-office movement to provide 24x7 reliable power supply in its licensed area and many other office related assignments including attending meetings / court proceedings / inspection of materials / vendor-verifications etc. in NCR and nearby States. The provision of vehicles not only ensures efficient and prompt services in economical manner but also necessary to ensure safety of its employees being working even in the odd-hours / night time. The vehicles are essential for smooth movement of company's officials for efficiently providing services to the consumers in the licensed area which is spread over 335 Sq. km and the distance from east to west ranges from 45 - 50 Kms approx. The vehicles are purchased after detailed evaluation of the requirements and as per the Company policy.

6.6.38 The Commission observed that the Petitioner has submitted Rs. 8.15 Crore towards capitalization of land for FY 2023-24 in this regard the Commission vided E-mail dated February 17, 2023 sought details of COD of the proposed new 33/11 kV Substations cum Switching Stations on the concerned land. In reply, the Petitioner submitted that it has filed a petition before the Commission, seeking prior approval for estimated Capex of Rs 129.71 Crore and R&M Expenses for "Power evacuation plan from upcoming 220 kV & 132 kV grid S/S being constructed in Greater Noida" to cater the future load growth & demand in the Greater Noida area. The cost of

Rs. 8.15 Crore will incur in acquiring the land from GNIDA for construction of 33/11kV Substations cum Switching Stations. The Petitioner further submitted the expected COD of proposed 33/11kV Substations cum Switching Stations for which land to be acquired in below Table: -

TABLE 6-82: PROPOSED 33/11KV SUBSTATIONS CUM SWITCHING STATIONS FOR FY 2023-24 WITH EXPECTED DATE OF COD

Projects	Land Cost included in Project	Expected COD
Construction of 33kV Switching cum 33/11kV Substation with 33kV Double Bus GIS Switchboard **at Sector 4, Greater Noida West (1X12.5MVA)**	4.06	FY 2023-24
Construction of 33kV Switching cum 33/11kV Substation with 33kV Double Bus GIS Switchboard **at Sector Ecotech-8 (1X12.5MVA), Greater Noida**	2.04	FY 2023-24
Construction of 33kV Switching cum 33/11kV Substation with 33kV Double Bus GIS Switchboard **at Sector Ecotech-10 (1X12.5MVA), Greater Noida**	2.04	FY 2023-24
Total	**8.15**	

6.6.39 The Commission observed that Consumer Contribution proposed for FY 2023-24 is Rs. 59.42 crore against Rs. 78.79 crore submitted for FY 2021-22. However, the Capital Investment of Rs. 314.82 Crore has been claimed for FY 2023-24 against Rs. 188.72 Crore for FY 2021-22. In this regard the Commission vide E-mail dated February 17, 2023 sought justification from the Petitioner for claiming lower amount of consumer contribution in ARR Year than amount claimed in True-Up year. The Petitioner in its reply submitted that during FY 2021-22, it has energized the connectivity of M/s Oppo at 132 kV level through a dedicated transmission lines against the consumer contribution of Rs. 54.89 Crore which is a non-recurring event. Apart from that, the Consumer Contribution estimated for FY 2023-24 is comparable with FY 2021-22 as evident from the following Table:

TABLE 6-83: COMPARATIVE OF CONSUMER CONTRIBUTION

Particulars	U.o.M.	Ref.	FY 2021-22	FY 2023-24
Gross Addition to GFA	**Rs. Cr.**	**a**	**199.16**	**326.42**
Assets retired	Rs. Cr.	b	10.44	11.60
Net Addition to GFA	**Rs. Cr.**	**c=a-b**	**188.72**	**314.82**

Particulars	U.o.M.	Ref.	FY 2021-22	FY 2023-24
Consumer contribution from M/s Oppo	Rs. Cr.	d	54.89	-
Net Addition to GFA w/o M/s Oppo	**Rs. Cr.**	**e=c-d**	**133.83**	**314.82**
Total Consumer Contribution	**Rs. Cr.**	**f**	**78.79**	**59.42**
M/s Oppo's consumer contribution	Rs. Cr.	g=d	54.89	-
Net Consumer Contribution from other consumers	**Rs. Cr.**	**h=f-g**	**23.90**	**59.42**
Net Contribution / Net Addition to GFA	**%**	**i=h/e**	**18%**	**19%**

6.6.40 The Petitioner vide E-mail dated May 09, 2023 submitted that in Business Plan for FY 2020-21 to FY 2024-25 filed in October 2019 (Petition No. 1526 of 2019), the following capex was proposed for the MYT Control Period form FY 2020-21 to FY 2024-25.

Financial Year	Capex (a)	Consumer Contribution (b)	Net Capex c=a-b
2020-21	195.20	14.55	180.65
2021-22	240.60	18.25	222.35
2022-23	276.96	17.29	259.67
2023-24	269.57	19.30	250.27
2024-25	296.41	21.34	275.07
Total	**1,278.74**	**90.73**	**1,188.01**

6.6.41 The Commission vide order dated November 26, 2022 stated that: -

Quote

The Commission directs the Licensee to submit the capex plans etc. annually along with the ARR petition according to the approved distribution loss reduction trajectory.

Unquote

6.6.42 Accordingly, the Petitioner filed its Capex plan along with its annual ARR petition and was approved and trued up as follows:

FY	Capex net of Consumer Contribution (in Rs. Cr.)			
	Petitioned (a)	Approved (ARR) (b)	True-Up Petition (c)	Approved (True-up) (d)
2020-21	180.65	177.75	80.22	60.06
2021-22	242.53	127.20	120.37	-
2022-23	163.55	126.73	69.46*	-
2023-24	267.00	-	-	-
2024-25	-	-	-	-
Total	**853.73**	**431.68**	**270.05**	**60.06**

* *Unaudited*

6.6.43 The Petitioner further submitted that from the above, the Commission may kindly see that against an approved capex of Rs. 431.68 Crore for FY 2020-21 to FY 2022-23, Rs. 270.05 Crore only has been spent and Rs. 161.63 Crore is still available to be utilized in FY 2023-24 and FY 2024-25. Further, for FY 2023-24, it has submitted a net Capex of Rs. 267.00 Crore including Rs. 87.33 Crore, being part of Power Evacuation Project of Rs. 129.72 Crore (To be incurred over 2 years i.e. Rs. 87.33 Crore in FY 2023-24 and Rs. 42.39 Crore in FY 2024-25) for the kind consideration and approval of the Commission. For approval of the aforesaid Power Evacuation Project, a detailed project report with all the requisite details and formats has been filed vide Petition No. 1950 / 2023 on January 06, 2023 for approval of the Commission.

6.6.44 The Petitioner further submitted that for FY 2023-24 and FY 2024-25, apart from the proposed capex submitted / to be submitted for the approval, there is unutilized capex of Rs. 161.73 Crore brought forward from FY 2020-21 to FY 2022-23. Thus, the proposed net capex of Rs. 267.00 Crore for FY 2023-24 is well within the approved capex of the Commission and is not likely to have any significant impact of the Tariff for the Control Period.

6.6.45 The Commission vide E-mail dated February 17, 2023 sought documentary evidence & status of the approval of Capital Cost of the works for Power evacuation from New/Upcoming 220 kV & 132 kV substations being constructed at Greater Noida during FY 2023-24 submitted in Capital Expenditure for project having value more than 10 Crore in the ARR Petition for FY 2023-24. In reply, the Petitioner stated that it has submitted a petition on January 06, 2023 before the Commission for approval of Power evacuation plan from upcoming 220 kV & 132 kV grid substations being constructed in Greater Noida, which is reserved for order.

6.6.46 The Commission observed that the Petitioner for ARR FY 2023-24 has claimed Capitalization of Rs. 326.42 Crore. However, vide Petition No. 1526 of 2019 in the business plan submitted by the Petitioner, the Capitalization has been shown as Rs. 269.57 Crore. The Commission has considered the Capitalization as per approved Business Plan which also includes Capital cost of Rs. 87.33 Crore for which Petition for approval is filed before the Commission on January 06, 2023 for the Power evacuation plan from upcoming 220 kV & 132 kV grid substations being constructed in Greater Noida in FY 2023-24.

6.6.47 The Commission further observed that the Petitioner has claimed Rs. 13.54 Crore towards building Cyber Resilience and in regards to this, the petitioner has filed a petition for approval of the said capex vide Petition No. 1927 of 2022 on December 19, 2022, the same is under consideration and requires more inputs from the Petitioner. Hence, taking into consideration the above, the Commission is of the view not to consider the same while approving the ARR for FY 2023-24 & based on the outcome of the said petition, the same will be dealt at the time of True-up.

6.6.48 Further, Section 61(d) of the Electricity Act, 2003 mandates the "safeguarding of consumers' interest and at the same time, recovery of cost of electricity in a reasonable manner". In line to this the Commission has always endeavored to safeguard the interests of consumers' & approved ARR of any licensee should include only the necessary & legitimate costs. The fixed assets of licensee & its core business both should be in harmony and necessary because this impacts the various components of ARR i.e. Depreciation, Return on Equity and Interest on Term Loan and hence the tariff and subsequently the interests of the consumers'. If a licensee makes additions in the fixed assets which are not adding any values to the core business, it impacts the various components of ARR resulting high ACOS & should be disallowed. Accordingly, the Commission taking into consideration the views taken in the True Up of FY 2021-22 disallows the amount of Rs. 3.49 Crore claimed towards the GFA addition under asset class of 'vehicles' for FY 2023-24.

6.6.49 The Commission has considered the consumer contribution and Employee Expenses Capitalised as submitted by the Petitioner, whereas Deletion of Asset is allowed as per the Business plan submitted by the Petitioner (Petition no. 1526 of 2019).

TABLE 6-84: CAPITAL EXPENDITURE PROJECTS OF VALUE EXCEEDING Rs. 10 CRORE APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Sl. No.	Nature of Works	Projected	Approved
1	Power Evacuation from new / upcoming 220 kV & 132 kV Substations being constructed at Greater Noida during FY 2023-24	87.33	87.33
2	Investments to Build Cyber Resilience	13.54	-
	Total	100.88	87.33

TABLE 6-85: CAPITAL EXPENDITURE PROJECTS OF VALUE NOT EXCEEDING Rs. 10 CRORE APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Sl. No	Nature of Works	Projected	Approved
1	New Connections, Replacement Stock & Metering	105.23	181.28
2	Construction of Substations, Transformers, and Construction of 33kV, 11 kV & LT Network	60.17	
3	Loss Control Activity	8.86	
4	Process System Automation	15.95*	
5	IT Projects	9.42	
6	Civil Works & Office Infrastructure Facility	6.05	
7	Tools & Testing Equipment	3.37	
8	Demand Side Management	1.00	
9	Employee Expenses Capitalized	12.00	
10	Vehicles	3.49	-
11	**Total**	**225.54**	**181.28**

**Typographical error made by the Petitioner has been corrected here. It was shown as Rs. 16.95 Crore, Howerver, it is Rs. 15.95 Crore as submitted by the Petitioner in detal excel.*

TABLE 6-86: CAPITALIZATION APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Particulars	Ref	ARR Petition	Approved
Total Addition (capitalization) to Assets	A	326.42	268.61
Total Deletion to Assets (excluding interest capitalization)	B	11.60	8.60
Net Capitalisation	**C=A-B**	**314.82**	**260.01**
Consumer Contribution	D	59.42	59.42
Net Capex	**E=C-D**	**255.40**	**200.59**
Debt Addition @ 70%	**70% of E**	**178.78**	**140.41**
Equity Addition @ 30%	**30% of E**	**76.62**	**60.18**

6.6.50 Regulation 20 of the MYT Regulations, 2019 specifies as under: -

Quote

20 Debt-Equity Ratio

20.1 For a capital investment Scheme declared under commercial operation on or after April 1, 2020, debt-equity ratio as on the date of commercial operation shall be 70:30 of the amount of capital cost approved by the Commission under

Regulation 18, after making appropriate adjustment of Assets funded by Consumer Contribution/ Deposit Works/ Capital Subsidies/ Grant subject to prudence check for determination of Tariff:

Provided that if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan for the Licensee for determination of Tariff:

Provided further that the Licensee shall submit documentary evidence for the actual deployment of equity and explain the source of funds for the equity:

Provided also that where equity actually deployed is less than 30% of the capital cost of the capitalised asset, the actual equity shall be considered for determination of Tariff:

Provided also that the equity invested in foreign currency shall be designated on the date of each investment.

20.2 In case of the Licensee, for the fixed assets capitalised on account of Capital Expenditure Scheme prior to April 1, 2020, the debt-equity ratio allowed by the Commission for determination of ARR / Tariff for the period ending March 31, 2020 shall be considered:

Provided that in case of retirement or replacement or de-capitalisation of the assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of such assets:

Provided further that in case of retirement or replacement or de-capitalisation of the assets, the debt capital approved as mentioned above, shall be reduced to the extent of outstanding debt component based on documentary evidence, or the normative loan component, as the case may be, of the original cost of such assets.

20.3 Any expenditure incurred or projected to be incurred on or after April 1, 2020, as may be admitted by the Commission as additional capital expenditure for determination of Tariff, and Renovation and Modernisation expenditure for life extension, shall be serviced in the manner stipulated in these Regulations.

Unquote

6.6.51 The Commission has considered the Trued-Up closing GFA of FY 2021-22 as opening GFA for FY 2022-23. For the purpose of arriving at the closing value of GFA of FY 2022-23, the Commission has considered the capitalization of Rs. 141.97 Crore by deducting 100% of cost of vehicles, land and 25% of the claims under the other asset classes. The Commission has considered the deduction of assets as claimed by the Petitioner. The capex / capitalization computed is subject to final outcome of the capex petition filed before the Commission under Regulation 44.2 of MYT Regulations, 2019 and further prudence check at the time of truing up. The computation is shown in tables below:

TABLE 6-87: GFA COMPUTED FOR FY 2022-23 (Rs. Crore)

Particulars	Derivation	Claimed	Computed (Provisional)
Opening GFA	A	1966.05	1505.71
Addition to GFA during the year	B	189.05	141.97
Decapitalization / deduction	C	10.75	10.75
Closing GFA	E=A+B-C	2144.36	1636.93

6.6.52 In regard to FY 2023-24, the Commission has considered the closing GFA of FY 2022-23 derived above as the opening GFA for FY 2023-24. The additional capitalization of Rs. 268.61 Crore is allowed for FY 2023-24 as detailed above. The deletion during the year is considered as projected by the Petitioner, subject to prudence check at the time of truing up. Accordingly, the GFA for FY 2023-24 approved by the Commission is as follows: -

TABLE 6-88: GROSS FIXED ASSET OF NPCL FOR FY 2023-24 (Rs. Crore)

Particulars	Derivation	Claimed	Computed
Opening GFA	A	2144.36	1636.93
Addition to GFA during the year	B	326.42	268.61
Decapitalization / deduction	C	11.60	8.60
Closing GFA	E=A+B-C	2459.18	1896.94

6.7 DEPRECIATION

Petitioner's Submission

6.7.1 The Petitioner submitted that based on the Capital Expenditure and GFA as shown above, the amount considered for Depreciation for determination of ARR for FY 2023-24 is provided in Table below: -

Table 6-89: DEPRECIATION SUBMITTED BY THE PETITIONER FOR FY 2023-24 (Rs. Crore)

Sl. No.	Particulars	Reference	Projected
1	Depreciation on Gross Block till 01.04.2020	a	56.21
2	Depreciation on Gross Block after 01.04.2020	b	35.95
3	**Gross Depreciation for the Year**	**c=a+b**	**92.16**
4	Less: Depreciation on Consumer Contribution	d	17.36
5	**Net Depreciation**	**e-c-d**	**74.79**
6	Average Gross Fixed Asset	f	2,301.77
7	% of Average Gross Fixed Asset	g=c/f	4.00%

6.7.2 The Petitioner submitted that the depreciation of Rs. 74.79 Crore has been computed as per the methodology followed by the Commission in its Tariff Orders dated December 04, 2020, August 26, 2021 and July 20, 2022 with GFA bases as per the Petitioner's submissions for Truing-Up. The Petitioner has considered the depreciation at the rates as prescribed in Annexure-A of the MYT Tariff Regulation, 2019 on SLM method and requested the Commission to approve the depreciation expenses as computed above for FY 2023-24.

Commission's Analysis

6.7.3 Regulation 21 of MYT Regulations, 2019 specifies as under: -

Quote

21 Depreciation:

21.1 The Licensee, shall be permitted to recover Depreciation on the value of fixed assets used in their respective businesses, computed in the following manner:

a) The approved original cost of the fixed assets shall be the value base for calculation of Depreciation:

Provided that the Depreciation shall be allowed on the entire capitalised amount of the new assets after reducing the approved original cost of the retired or replaced or decapitalised assets.

b) Depreciation shall be computed annually based on the Straight- Line Method at the rates stipulated in the Annexure- A of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019.

Provided that the Licensee shall ensure that once the individual asset is depreciated to the extent of seventy percent, remaining depreciable value as on 31st March of the year closing shall be spread over the balance Useful Life of the asset including the Extended Life, as per submission of the Licensee and approved by the Commission.

c) The salvage value of the asset shall be considered at 10% of the allowable capital cost and Depreciation shall be allowed up to a maximum of 90% of the allowable capital cost of the asset:

Provided that land owned shall not be treated as a Depreciable asset and shall be excluded while computing Depreciation:

Provided further that Depreciation shall be chargeable from the first year of commercial operation.

d) Depreciation shall not be allowed on assets funded by Consumer Contributions or Subsidies/ Grants/ Deposit works.

21.2 In case of existing assets, the balance depreciable value as on April 01, 2020, shall be worked out taking into consideration the life of the asset, and by deducting the cumulative Depreciation as admitted by the Commission up to March 31, 2020, from the gross depreciable value of the assets.

21.3 In case of projected commercial operation of the assets for part of the year, depreciation shall be computed based on the average of opening and closing value of assets.

21.4 Depreciation shall be re-computed for assets capitalised at the time of Truing-Up, based on Audited Accounts and documentary evidence of assets capitalised by the Petitioner, subject to the prudence check of the Commission.

Unquote

6.7.4 The Commission observed that the Petitioner has claimed the additional Capitalisation as Rs. 326.42 Crore for FY 2023-24, whereas the depreciation sheet (Format F30) shows Rs. 311.43 Crore. In this regard the Commission vide letter dated January 06, 2023 sought reconciliation from the Petitioner in reply to the query the Petitioner submitted that there was an inadvertent error in “Annexure-

9 Depreciation as per UPERC Method" submitted along with the Petition No. 1919 of 2022 dated November 30, 2022. The same has been corrected and resubmitted as follows: -

S.No.	Particulars	Gross Fixed Assets				
		Opening GFA	Addition to GFA	Deduction to GFA	Deduction Grants	Closing GFA
1	Land	158.93	8.15	-	-	167.08
2	Buildings	219.74	22.32	-	-	242.06
3	Plant & Machinery	55.33	-	-	-	55.33
4	Lines & Cables	998.51	238.55	7.05	-	1,230.01
5	Vehicles	7.47	3.49	-	-	10.96
6	Furniture & Fixtures	21.73	-	0.75	-	20.98
7	Office Equipments	12.69	8.08	1.45	-	19.33
8	Metering Equipment	75.40	9.72	2.35	-	82.77
9	Communication Equipment	27.34	16.56	-	-	43.91
10	Intangible Assets	46.23	18.55	-	-	64.78
11	Assets taken over & pending final valuation	1.20	-	-	-	1.20
12	Solar Power Generation Equipments	1.18	1.00	-	-	2.18
10	**Total Fixed Assets**	**1,625.77**	**326.42**	**11.60**	**-**	**1,940.59**
11	Non depreciable assets (Land & Land Rights)	3.99	-	-	-	3.99
12	**Depreciable assets**	**1,621.78**	**326.42**	**11.60**	**-**	**1,936.60**

6.7.5 The Commission vide deficiency dated January 06, 2023 sought basis for projection of deletion in assets of Rs. 11.60 Crore for FY 2023-24. In reply, the Petitioner submitted that based on the actual amount of assets retired during previous years, it has estimated retirement value of assets of Rs. 11.60 Crore during FY 2023-24 subject to truing up as per Audited Annual Accounts.

6.7.6 The Commission directed the Petitioner to maintain a separate individual asset wise FAR for assets capitalized after April 01, 2020 and the Gross Block and Depreciation may be computed separately from the Gross Block before April 01, 2020. Accordingly, from FY 2020-21 onwards, the Petitioner maintains two separate Gross Blocks (one for assets upto March 31, 2020 (Part-A) and second for assets after April 01, 2020 (Part B) and two separate FAR's depicting addition of Assets details from April 01, 2020 onwards for the purpose of depreciation computation.

TABLE 6-90: GROSS ALLOWABLE DEPRECIATION FOR ASSETS UPTO MARCH 31, 2020 OF NPCL FOR FY 2023-24 (Rs. Crore) (PART- A)

S. No.	Particulars	Opening GFA	Addition to GFA	Deduction to GFA	Closing GFA	Average GFA	Depreciation Rate	Allowable Gross Depreciation
1	Land	42.60	0.00	0.00	42.60	42.60	3.34%	1.29
2	Buildings	150.81	0.00	0.00	150.81	150.81	3.34%	5.04
3	Plant & Machinery	34.15	0.00	0.00	34.15	34.15	5.28%	1.80
4	Lines & Cables	483.51	0.00	5.23	478.28	480.90	5.28%	25.39
5	Vehicles	0.00	0.00	0.00	0.00	0.00	9.50%	0.00
6	Furniture & Fixtures	15.18	0.00	0.56	14.63	14.90	6.33%	0.94
7	Office Equipments	6.95	0.00	1.08	5.88	6.42	6.33%	0.41
8	Metering Equipment	29.44	0.00	1.74	27.70	28.57	5.28%	1.51
9	Communication Equipment	9.59	0.00	0.00	9.59	9.59	5.28%	0.51
10	Intangible Assets	21.95	0.00	0.00	21.95	21.95	15.00%	3.29
11	Assets taken over & pending final valuation	0.74	0.00	0.00	0.74	0.74	15.00%	0.11
12	Solar Power Generation Equipment	0.17	0.00	0.00	0.17	0.17	5.28%	0.01
13	**Total Fixed Assets**	**795.10**	**0.00**	**8.60**	**786.50**	**790.80**	**-**	
14	Non depreciable assets (Land & Land Rights)	3.92	0.00	0.00	3.92	3.92	-	
15	**Depreciable assets**	**791.18**	**0.00**	**8.60**	**782.58**	**786.88**	**5.12%**	**40.30**

TABLE 6-91: GROSS ALLOWABLE DEPRECIATION FOR ASSETS FROM APRIL 01, 2020 ONWARDS OF NPCL FOR FY 2021-22 (Rs. Crore) (PART - B)

Particulars	Allowable
Opening GFA (Part-B)	387.09
Addition to GFA (Part-B)	268.61
Deduction to GFA (Part-B)	0.00
Closing GFA (Part-B)	655.70
Average GFA (Part-B)	521.40
Avg. Dep. Rate (as per True-Up for FY 2021-22)	5.67%
Gross Depreciation (Part-B)	**29.57**

Table 6-92: NET APPROVED DEPRECIATION FOR ASSETS BEFORE 1.4.2020 (PART -A) FY 2023-24 (Rs. Crore)

S. No.	Particulars	Claimed	Allowable
1	Gross allowable Depreciation	92.16	40.30
2	Less: Equivalent amount of depreciation on assets acquired out of the Consumer Contribution	17.36	9.73
3	**Net allowable Depreciation (for the year)**	74.79	**30.57**

Table 6-93: NET APPROVED DEPRECIATION FOR ASSETS AFTER 1.4.2020 (PART- B) FY 2023-24 (Rs. Crore)

S. No.	Particulars	Claimed	Allowable
1	Gross allowable Depreciation	0.00	29.57
2	Less: Equivalent amount of depreciation on assets acquired out of the Consumer Contribution	0.00	7.63
3	**Net allowable Depreciation (for the year)**	**0.00**	**21.93**

TABLE 6-94: NET APPROVED DEPRECIATION FOR ASSETS BEFORE 01.04.2022 (PART A + PART B) OF NPCL FOR FY 2023-24 (Rs. Crore)

S. No.	Particulars	Claimed	Allowable
1	Gross allowable Depreciation	92.16	69.87
2	Less: Equivalent amount of depreciation on assets acquired out of the Consumer Contribution	17.36	17.36
3	**Net allowable Depreciation (for the year)**	**74.79**	**52.50**

6.8 INTEREST ON TERM LOAN

Petitioner's Submission

6.8.1 The Petitioner submitted that in accordance with Regulation 20.2 of the MYT Regulations, 2019, the Debt and Equity as at end of FY 2019-20 shall be considered as Opening Debt and Equity for FY 2021-22. However, as the Petitioner has filed appeals against the Tariff Orders dated December 04, 2020 and August 26, 2021 (since remanded back vide judgement dated November 24, 2022) and July 20, 2022 before the Hon'ble APTEL, it has considered the Debt and Equity as per its True-Up Petitions / submission, for determination of Interest on Term Loan for FY 2023-24. Consequently, on the basis of Capital Expenditures for FY 2018-19 to FY 2022-23 as claimed by the Petitioner as well as stipulated debt equity of 70:30, the opening normative net debt for FY 2022-23 works out to Rs. 571.25 Crore.

6.8.2 The Petitioner submitted that repayment of Normative Term Loan has been considered as equivalent to depreciation being computed in accordance with Regulation 23 of the MYT Regulation, 2019.

6.8.3 Further, Regulation 23.5 of MYT Regulations, 2019 provides as follows: -

Quote

23.5 The rate of interest shall be the weighted average rate of interest *computed on the basis of the actual long- term loan portfolio at the beginning of each year:*

Provided that at the time of Truing- Up, the weighted average rate of interest of the actual long- term loan portfolio during the concerned year shall be considered as the rate of interest:

Provided further that if there is no actual long- term loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest for actual loan shall be considered….

Unquote

Since the Petitioner does not have any actual Term Loan outstanding, therefore in accordance with above regulation, the last available weighted average rate of interest for the term loan has been considered for determination of normative interest on the term loan for FY 2023-24.

6.8.4 Accordingly, the summary of interest on Term Loan (normative) for FY 2023-24 based on the above opening debt and additional debt requirement of Rs. 178.78 Crore for FY 2023-24 is given in the Table below: -

TABLE 6-95: INTEREST ON TERM LOAN AS SUBMITTED BY THE PETITIONER FOR FY 2023-24
(Rs. Crore)

Sl. No.	Loan Computation	Ref.	Projected
1	**Net Normative loan – Opening**	**A**	**571.25**
2	Increase/Decrease due to ACE during the Year	B	178.78
3	Repayments of Normative Loan during the year	C	74.79
4	**Net Normative loan – Closing**	**d=a+b-c**	**675.23**
5	Average Normative Loan	e=(a+d)/2	623.24
6	Weighted average Rate of Interest on actual Loans	F	9.91%
7	**Interest on Normative loan**	**g=e x f**	**61.78**

Commission's Analysis

6.8.5 Regulation 23 of the MYT Regulations, 2019 provides for treatment of interest on term loan as under:

Quote

23 Interest on Long-Term Loan

23.1 The long- term loans arrived at in the manner indicated in these Regulations on the assets put to use shall be considered as gross normative loan for calculation of interest on loan:

Provided that in case of retirement or replacement or de-capitalisation of assets, the loan capital approved as mentioned above, shall be reduced to the extent of outstanding loan component of the original cost of such assets based on documentary evidence.

23.2 The normative long- term loan outstanding as on April 1, 2020, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2020, from the gross normative loan.

23.3 The repayment for each year shall be deemed to be equal to the Depreciation allowed for that year.

23.4 Notwithstanding any moratorium period availed, the repayment of loan shall be considered from the first year of commercial operation of the asset.

23.5 The rate of interest shall be the weighted average rate of interest computed on the basis of the actual long- term loan portfolio at the beginning of each year:

Provided that at the time of Truing- Up, the weighted average rate of interest of the actual long- term loan portfolio during the concerned year shall be considered as the rate of interest:

Provided further that if there is no actual long- term loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest for actual loan shall be considered:

Provided also that if the Licensee, does not have actual long- term loan even in the past, the weighted average rate of interest of its other Businesses regulated by the Commission shall be considered:

Provided also that if the Licensee does not have actual long- term loan, and its other Businesses regulated by the Commission also do not have actual loan even in the past, then the weighted average rate of interest of the entity as a whole shall be considered:

Provided also that if the entity as a whole does not have actual long-term loan because of which interest rate is not available, then the rate of interest for the purpose of allowing the interest on the normative long- term loan should be the weighted average SBI MCLR (1 Year) prevailing during the concerned year.

23.6 The interest on long- term loan shall be computed on the normative average long- term loan of the year by applying the weighted average rate of interest:

Provided that at the time of Truing-Up, the normative average loan of the concerned year shall be considered on the basis of the actual asset capitalisation approved by the Commission for the year.

23.7 The excess interest during construction on account of time and / or cost overrun as compared to the approved completion schedule and capital cost or on account of excess drawal of the debt funds disproportionate to the actual requirement based on Scheme completion status, shall be allowed or disallowed partly or fully on a case to case basis, after prudence check by the Commission:

Provided that where the excess interest during construction is on account of delay attributable to an agency or contractor or supplier engaged by the Licensee, any liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost:

Provided further that the extent of liquidated damages to be considered shall depend on the amount of excess interest during construction that has been allowed by the Commission.

Unquote

6.8.6 The Commission has considered debt equity ratio for the assets capitalized of 70:30 in line with the MYT Regulations, 2019. Further, in case the equity is less than 30%, the actual equity shall be considered and if equity is more than 30%, the amount of equity shall be limited to 30%. Therefore, the balance asset capitalized shall be treated as normative loan for determination of Tariff. The same approach has been considered for approval of ARR in the Tariff Order for FY 2020-21, FY 2021-22 and FY 2022-23.

6.8.7 The Commission has discussed detailed approach taken for computation of opening loan while doing True Up for FY 2021-22. The opening loan balance for FY 2022-23 is consideration the approved closing normative loan balance of FY 2021-22 as approved in this Order. Subsequent normative loan addition during the FY

2022-23 is considered as 70% of net GFA addition excluding Consumer Contribution to derive the closing loan balance for FY 2022-23. The interest rate is considered as 9.91% as approved while truing of FY 2021-22. Further, the allowable net depreciation for the year has been considered for normative loan repayment Accordingly, the interest on long term loan provisionally considered by the Commission for FY 2022-23 is shown in the Table below: -

TABLE 6-96: INTEREST ON LONG TERM LOAN COMPUTED BY THE COMMISSION FOR FY 2022-23

(Rs. Crore)

Particulars	Approved in Tariff Order dated July 20, 2022	Petitioner's Claim	Approved
Opening Loan	424.12	535.65	395.70
Loan Additions (70% of Capitalisation)	83.28	99.44	66.48
Less: Repayments (Depreciation allowable for the year)	47.42	63.85	43.83
Closing Loan Balance	**459.98**	**571.24**	**418.35**
Average Balance of Normative Loan	**442.05**	**553.45**	**407.02**
Rate of Interest	9.91%	9.91%	9.91%
Interest on long term loans	**43.81**	**54.86**	**40.34**

6.8.8 The Commission has considered normative closing loan balance of APR year FY 2022-23 derived above as opening loan balance for FY 2023-24. The portion of capitalization financed through Consumer Contributions has been separated as the depreciation thereon would not be charged to the consumers. Further, the allowable net depreciation for the year has been considered for normative loan repayment. Subsequent normative loan addition during the FY 2023-24 is considered as 70% of net GFA addition excluding Consumer Contribution for FY 2023-24 approved by the Commission in this order.

6.8.9 The Commission has observed that the Petitioner has claimed interest capitalization as nil for FY 2023-24. Hence the interest capitalization is considered as nil for FY 2023-24 as claimed by the Petitioner, subject to prudence check at the time of truing up.

6.8.10 The Commission has considered the weighted average rate of interest as approved in the true-up of FY 2021-22. Accordingly, the Interest on Long Term Loan computed by the Commission for FY 2023-24 is shown in table below: -

TABLE 6-97: INTEREST ON LONG TERM LOAN A BY THE COMMISSION FOR FY 2023-24
(Rs. Crore)

Particulars	Petitioner's Claim	Approved
Opening Loan	571.24	418.35
Loan Additions (70% of Capitalisation)	178.78	140.41
Less: Repayments (Depreciation allowable for the year)	74.79	52.50
Closing Loan Balance	675.23	506.26
Average Balance of Normative Loan	**623.24**	**462.30**
Rate of Interest	9.91%	9.91%
Interest on long term loans	**61.78**	**45.81**

As per the Regulation 23.1 of UPERC MYT Regulations, 2019, the assets put to use shall be considered as gross normative loan for calculation of interest on loan.

6.9 INTEREST ON WORKING CAPITAL

Petitioner's Submission

6.9.1 The Petitioner submitted that, as per the UP-Electricity Supply Code, 2005 (as amended), the power supply bill for a month (30/31 days) needs to be raised within next 7 days with 15 days period (due date) for payment of the same. Thereafter, the Distribution Licensee must wait for another 15 days period before disconnecting supply of power in case of non-payment (disconnection date). Thus, it would take almost 67 days for a Distribution Licensee to recover payment of its electricity bills, assuming all the consumers pay their bills in-time. However, the MYT Regulations, 2019 considers debtors equivalent to 45 days only while in MYT Regulations 2014, debtors equivalent to two months of the expected revenue were considered as a part of the working capital requirement. Therefore, the reduction of receivables from two months to one and half months is not justified and in fact is contrary to the provisions of Electricity Supply Code, 2005.

6.9.2 The Petitioner further submitted that the Commission in its Tariff Order dated July 20, 2022 has not considered the Electricity Duty as part of the Receivables thereby reducing amount of Working Capital leading to disallowance of interest on working capital based on Regulation 25.2 of the MYT Regulations, 2019. In this regard, the Petitioner submitted that the Commission may refer Section 4A of the U.P Electricity (Duty) Act, 1952 which provides as under:

Quote

4-A. ***Reimbursement of electricity duty from consumers***

………..

(2) ***For the purpose of recovering the amount of electricity duty from the consumer, the licensee*** *or the appointed authority, as the case may be, may without prejudice to any other mode of recovery,* ***exercise the power*** *conferred on the licensee under sub-section (1) of the Section 24 of the Indian Electricity Act, 1910 (Act no, IX of 1910),* ***as if the duty were a charge or sum due in respect of energy supplied to such consumer. ………..***

Unquote

6.9.3 The Petitioner submitted that in view of the above provisions of the Section 4A, the Electricity Duty is considered at par with the charges for energy supplied to a consumer and accordingly, the Electricity Duty is billed by the Petitioner to the consumers alongwith other charges for electricity. Therefore, the same is integral part of the revenue and the receivables of the Petitioner. Accordingly, disallowance of working capital interest by not considering Electricity Duty as part of Receivables is against the commercial principles, the provisions of The Electricity (Duty) Act, 1952 as well as Commission's own earlier practice. Therefore, the Petitioner has considered Electricity Duty as part of Receivables for the purpose of determination of normative Interest on Working Capital. Based on the above, the Petitioner submitted its computation of interest on working capital for FY 2023-24 as shown below: -

TABLE 6-98: INTEREST ON WORKING CAPITAL AS SUBMITTED BY THE PETITIONER FOR FY 2023-24 (Rs. Crore)

Sl. No.	Particulars	Ref	Projected
1	O&M expenses for 1 month	a	15.07
2	One and a half month equivalent of expected revenue from distribution tariff	b	311.42
3	Maintenance spares @ 40% of the R&M Expense for 2 Months	c	6.53
4	**Gross Total**	**d=a+b+c**	**333.02**
5	Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003:		
6	Opening Balance	e	322.56
7	Received during the year (Net of Refunds)	f	31.87
8	Closing Balance	g=e+f	354.43
9	**Average Security Deposit**	**h=(e+g)/2**	**338.50**

Sl. No.	Particulars	Ref	Projected
10	Security Deposit with UPPCL	I	11.28
11	**Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003**	**j=h-i**	**327.22**
12	**Net Working Capital**	**k=d-j**	**5.80**
13	Rate of Interest for Working Capital (SBI - 1Year MCLR + 2.50%)	I	10.20%
14	**Interest on Total Working Capital**	**m=k*l**	0.59

6.9.4 The Petitioner submitted that as per earlier petitions and duly approved by the Commission in its last Tariff Order dated August 26, 2021 the security deposit of Rs. 11.28 Crore passed on to UPPCL till FY 2005-06 in accordance with past arrangement, has been deducted from the total security deposit available with the Petitioner while computing working capital requirement as the same are not available at the disposal of the Petitioner for meeting its working capital requirements. The Petitioner further submitted that the above table does not include the amount of Rs. 10.00 Crore paid to UPPCL based on the Orders of the Commission and Hon'ble Allahabad High Court in FY 2006-07 in the matter of providing 10 MVA additional supply of power by UPPCL. The matter is now pending before the Hon'ble Supreme Court of India.

Commission's Analysis

6.9.5 Regulation 25 of MYT Regulations, 2019 provides for determination of Interest on Working Capital as under:

Quote

*25 **Interest on Working Capital***

….

25.2 Distribution Business

(a) The working capital requirement of the Distribution Business shall cover:

(i) Operation and maintenance expenses for one month;

(ii) Maintenance spares at 40% of the R&M expenses for two months; and

(iii) One and half month equivalent of the expected revenue from charges for use of Distribution system at the prevailing Tariff (excluding Electricity Duty);

minus

(iv) Amount held as security deposits from Distribution System Users:

Provided that for the purpose of Truing-Up for any year, the working capital requirement shall be re-computed on the basis of the values of components of working capital approved by the Commission in the Truing- Up.

Unquote

6.9.6 The Commission has observed that the Petitioner, while computing one and a half month's revenue for Interest on Working capital has considered a factor of 1.05 while calculating the Working Capital requirement, which is not as per the MYT Regulations.

6.9.7 In accordance with the MYT Regulations, 2019, the interest on the working capital requirement shall be computed on the normative basis and rate of interest shall be equal to the SBI MCLR (1 Year) plus 250 basis points as of the date on which Petition for determination of tariff is accepted by the Commission. Accordingly, the Commission has considered the interest rate on working capital requirement at 10.20%. The link for the same is: https://www.sbi.co.in/web/interest-rates/interest-rates/mclr-historical-data.

6.9.8 The Interest on Working Capital as per MYT Regulations, 2019, is determined in the tables below:

TABLE 6-99: INTEREST ON WORKING CAPITAL APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Particulars	ARR Petition	Approved
One month's O&M Expenses	15.07	7.49
Maintenance spares @ 40% of R&M expenses for two months	6.53	3.27
One and half month equivalent of the expected revenue from charges for use of Distribution systems at the prevailing Tariff (excluding electricity duty)	311.42	301.65
Gross Total	**333.02**	**312.42**
Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	-	-
Opening Balance	322.56	322.56
Received during the year	31.87	31.87
Closing Balance	354.43	354.43
Less: Security Deposit	11.28	11.28

Particulars	ARR Petition	Approved
Net Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	327.22	327.21
Net Working Capital	**5.80**	**(14.79)**
Rate of Interest for Working Capital	10.20%	10.20%
Interest on Total Working Capital	**0.59**	**0.00**

6.10 INTEREST ON CONSUMER SECURITY DEPOSIT

Petitioner's Submission

6.10.1 The Petitioner stated that Regulation 25.2 (c), of the MYT Regulations, 2019 provides that the Petitioner shall pay interest equivalent to the bank rate or more on the consumer security deposits, as may be specified by the Commission. The Commission vide its Tariff Order of FY 2022-23 dated July 20, 2022 has approved the Interest on Security Deposit at 4.25% p.a. viz. RBI's Bank Rate prevailing on April 01, 2022 for FY 2022-23. Accordingly, based on the RBI's Bank Rate prevailing on date of preparation of this petition i.e., 4.25% p.a., the Petitioner has considered the same as interest payable on security deposit from consumers during FY 2023-24 as given below: -

TABLE 6-100: INTEREST ON SECURITY DEPOSIT AS SUBMITTED BY THE PETITIONER FOR FY 2023-24 (Rs. Crore)

Sl. No.	Particulars	Ref.	Projected
1	Opening Balance of Security Deposit	a	322.56
2	Addition During the year	b	31.87
3	Closing Balance for Security Deposit	c=a+b	354.43
4	**Average Balance for Security Deposit**	**d=(a+c)/2**	**338.50**
5	Rate of Interest	e	4.25%
6	**Interest payable on Security Deposit**	**f=dxe**	**14.39**

Commission Analysis

6.10.2 The opening balances of security deposits have been considered as per closing figures of FY 2022-23 and additions during the year FY 2023-24 is considered same as projected by the Petitioner, subject to prudence check at the time of truing up.

6.10.3 It can be observed from the above extract of UP Electricity Supply Code, 2005 that the Bank Rate as on 1st April of FY 2023-24 is applicable for computing interest on security deposit. Hence, the Commission has taken the Bank Rate of 4.25%

applicable as on April 01, 2023.

Source:(https://rbidocs.rbi.org.in/rdocs/Wss/PDFs/5T_08042022BF97FB2921F84D9FAC0F2F511C56A9B7.PDF). Accordingly, The Commission has approved the Interest on Consumer Security Deposit for FY 2023-24 as shown in the Table below:-

TABLE 6-101: INTEREST ON SECURITY DEPOSIT APPROVED FOR FY 2023-24 (Rs. Crore)

Particulars	ARR Petition	Approved
Opening Balance of Security Deposit	322.56	322.56
Addition During the year	31.87	31.87
Closing Balance for Security Deposit	354.43	354.43
Average Balance for Security Deposit	**338.50**	**338.50**
Rate of Interest	4.25%	4.25%
Interest payable on Security Deposit	**14.39**	**14.39**

6.11 SUMMARY OF INTEREST CHARGES

Petitioner's Submission

6.11.1 The details of total interest and finance charges estimated by the Petitioner for FY 2023-24 is given in the Table below: -

TABLE 6-102: TOTAL INTEREST CHARGES SUBMITTED BY THE PETITIONER FOR FY 2023-24 (Rs. Crore)

Particulars	ARR Petition
Interest on Long term loans	61.78
Interest on working capital facilities	0.59
Interest on security deposit	14.39
Total Interest Charges	**76.75**

Commission's Analysis

6.11.2 Based on the above, the summary of Interest Charges approved by the Commission for FY 2023-24 is as follows: -

TABLE 6-103: TOTAL INTEREST AND FINANCE CHARGES APPROVED BY THE COMMISSION FOR FY 2023-24 (RS. CRORE)

Particulars	FY 2023-24	
	Petition	Approved
Interest on Long Term Loans	61.78	45.81
Interest on Working Capital	0.59	0.00
Interest on Consumer Security Deposit	14.39	14.39
Total Interest Charges	**76.75**	**60.20**

6.12 RETURN ON EQUITY

Petitioner's Submission

6.12.1 Based on Regulation 20.2 of the MYT Regulation, 2019, the Debt and Equity as at end of FY 2019-20 shall be considered as Opening Debt and Equity for FY 2020-21. However, as the Commission is aware that the Petitioner has filed appeals against the Tariff Orders dated December 04, 2020, August 26, 2021 (since remanded back vide judgement dated 24.11.2022) and July 20,2022 before the Hon'ble APTEL, it has considered the opening balances of Debt and Equity as per its True-up Petition / submission for determination of Return on Equity for FY 2023-24.

6.12.2 Consequently, on the basis of Capital Expenditures for FY 2018-19 to FY 2022-23 as claimed by the Petitioner as well as stipulated debt equity of 70:30, the opening normative net Equity for FY 2023-24 works out to Rs. 536.74 Crore. The summary of Return on Equity for FY 2023-24 based on above referred Opening Equity and equity portion of Assets Capitalised during FY 2023-24 of Rs. 79.41 Crore is given in Table below: -

TABLE 6-104: RETURN ON EQUITY AS SUBMITTED BY THE PETITIONER FOR FY 2023-24
(Rs. Crore)

Sr. No.	Particulars	Reference	Projected
1	Equity (Opening Balance)	a	536.74
2	Net additions during the year	b	76.62
3	Equity (Closing Balance)	c=a+b	**613.35**
4	Average Equity	d=(a+c)/2	575.05
5	Rate of Return on Equity	e	15%
6	**Return on Equity**	**f=d x e**	**86.26**

Commission's Analysis

6.12.3 Regulation 22 of MYT Regulations, 2019 provides for Return on Equity as shown herein below:

Quote

*22 **Return on Equity***

22.1 Return on equity shall be computed in Rs. terms on equity base at the rate of 14.5% post-tax per annum for the Transmission Licensee and at the rate of

15% post-tax per annum for Distribution Licensee respectively as determined in accordance with Regulation 20:

Provided that assets funded by Consumer Contribution / Deposit works, Capital Subsidies / Grants and corresponding Depreciation shall not form part of the Capital Cost. Actual Equity infused by the Licensee as per book value shall be considered and shall be used for computation in these Regulations.

Unquote

6.12.4 The Commission has considered debt equity ratio for the assets capitalized of 70:30 in line with the MYT Regulations, 2019. In case the equity is less than 30%, the actual equity shall be considered and if equity is more than 30%, the amount of equity shall be limited to 30%. Therefore, the balance asset capitalized shall be treated as normative loan for determination of tariff. The same approach has been considered by the Commission in tis earlier Tariff Orders.

6.12.5 The Commission has discussed detailed approach taken for computation of opening equity considered for FY 2021-22. The opening equity balance for FY 2022-23 is consideration as closing equity balance of FY 2021-22 as approved by the Commission in this Order. The equity addition during the FY 2022-23 is considered as 30% of net GFA addition (after considering deduction / de-capitalization and Consumer Contribution in GFA) to derive the closing base of equity for FY 2022-23.

TABLE 6-105: ROE COMPUTED BY THE COMMISSION FOR FY 2022-23 (RS. CRORE)

Particular	Approved in TO dated 20.07.2022	ARR Petition	Approved
Equity (Opening Balance)	315.78	494.12	355.89
Net additions during the year	17.14	42.62	28.49
Equity (Closing Balance)	332.92	536.74	384.38
Average Equity	**324.35**	**515.43**	**370.14**
Rate of Return on Equity	15.00%	15.00%	15.00%
Return on Equity	**48.65**	**77.31**	**55.52**

6.12.6 The provisionally derived closing equity base of FY 2022-23 is considered as opening equity for FY 2023-24. Further, equity addition during the FY 2023-24 is considered as 30% of net GFA addition approved by the Commission after deduction of de-capitalization assets and Consumer Contribution in GFA.

6.12.7 It is observed that the Petitioner has filed the Petition within the time line specified in the MYT Regulations, 2019. Thus, the Commission has considered the rate of return on equity as 15.00% for FY 2023-24 as per Regulation 22 of MYT Regulations, 2019. Accordingly, the Return on Equity approved by the Commission for FY 2023-24 Is as shown in the Table below:

TABLE 6-106: ROE APPROVED BY THE COMMISSION FOR FY 2023-24 (RS. CRORE)

Particular	ARR Petition	Approved
Equity (Opening Balance)	**536.74**	**384.38**
Net additions during the year	76.62	60.18
Equity (Closing Balance)	**613.35**	**444.56**
Average Equity	575.05	414.47
Rate of Return on Equity	15.00%	15.00%
Return on Equity	**86.26**	**62.17**

6.13 INCOME TAX

Petitioner's Submission

6.13.1 The Petitioner submitted that on September 20, 2019, the Central Government introduced "Taxation Laws (Amendment) Act, 2019" wherein a new Corporate Tax Rate at 25.17% including Surcharge and Cess has been introduced under newly inserted Section 115BAA. However, the new rate U/s 115 BAA can be availed only by foregoing some specified exemption / deduction / allowance otherwise available in the Income Tax Act, 1961 as evident from the extract of the Amendment Act reproduced below: -

Quote

115 BAA (2) For the purposes of sub-section (1), the total income of the company shall be computed—

(i) without any deduction under the provisions of section 10AA or clause (iia) of sub-section (1) of section 32 or section 32AD or section 33AB or section 33ABA or sub-clause (ii) or sub-clause (iia) or sub-clause (iii) of sub-section (1) or sub-section (2AA) or sub-section (2AB) of section 35 or section 35AD or section 35CCC or section 35CCD or under any provisions of 80b[Chapter VI-A under the heading "C.—Deductions in respect of certain incomes" other than the provisions of section 80JJAA];

(ii) without set off of any loss carried forward or depreciation from any earlier assessment year, if such loss or depreciation is attributable to any of the deductions referred to in clause (i);

(iii) without set off of any loss or allowance for unabsorbed depreciation deemed so under section 72A, if such loss or depreciation is attributable to any of the deductions referred to in clause (i); and

(iv) by claiming the depreciation, if any, under any provision of section 32, except clause (iia) of sub-section (1) of the said section, determined in such manner as may be prescribed.

(3) The loss and depreciation referred to in clause (ii) and clause (iii) of sub-section (2) shall be deemed to have been given full effect to and no further deduction for such loss or depreciation shall be allowed for any subsequent year.

Unquote

6.13.2 The Petitioner submitted that, considering the lower tax rate available under the Income Tax Act, the Petitioner has adopted the new tax rate and accordingly has estimated Income Tax for FY 2023-24 at the rate of 25.17% as against normal tax rate of 34.94%. Considering the above, the Petitioner has computed the income tax liability for FY 2023-24 as shown in Table below: -

TABLE 6-107: INCOME TAX AS SUBMITTED BY THE PETITIONER FOR FY 2023-24 (RS. CRORE)

Sl. No.	Nature of Tax	Reference	Projected
1	Return on Equity	a	86.26
2	Income Tax Rate	b	25.17%
3	**Total Tax Expense**	**c=a x b/(1-b)**	**29.01**

Commission's Analysis

6.13.3 Regulation 26 of MYT Regulations, 2019 provides for determination of Income Tax to be considered in ARR for Control period FY 2020-21 to FY 2024-25. The relevant extract of the Regulation is reproduced below:

Quote

26. Income Tax

26.1 Income Tax, if any, on the licensed business of the Licensee shall be treated as expense and shall be recoverable from consumers through Tariff. However, *tax on any income other than that through its Licenced business shall not be a pass through, and it shall be payable by the Licensee itself.*

26.2 Notwithstanding anything contained in Regulation 26.1, total Income Tax payable by the Licensee, in any year, shall be lowest of the following:

(a) Actual payment made;

(b) ROE allowed in that year x MAT (%) or ROE allowed in that year x Corporate tax (%), whichever is applicable.

26.3 Any under recoveries or over recoveries of Tax on income shall be adjusted every year on the basis of Income Tax assessment under the Income Tax Act 1961, subject to Regulation 26.2 above, as certified by the Statutory Auditors.

Unquote

6.13.4 It can be observed from Regulation 26.3 of MYT Regulations, 2019, Tax on income, if any, liable to be paid shall be limited to tax on return on the equity component of capital employed. Therefore, in accordance with the aforementioned Regulations, the Licensee is eligible for the amount of Tax paid by them limited to Tax on return on the equity component of capital employed. Therefore, the Commission has approved Income tax for FY 2023-24 by grossing up approved Return on Equity at the current Tax rate, i.e., 25.17%, without considering any efficiency gains. The Commission shall consider the tax demand for earlier years, if any at the time of Truing-Up based on the Regulations applicable for the respective year. Accordingly, the Income Tax approved by Commission for FY 2023-24 is shown in the Table below: -

TABLE 6-108: INCOME TAX APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Particular	Ref.	ARR Petition	Approved
Return on Equity	a	86.26	62.17
Income Tax Rate	b	25.17%	25.17%
Total Tax Expense	**c=a x b/(1-b)**	**29.01**	**20.91**

6.14 OTHER MISCELLANEOUS ITEMS

Petitioner's Submission

Loss on Retirement/ Impairment of Asset:

6.14.1 The Petitioner has estimated to incur loss on sale / retirement of Fixed Assets during FY 2023-24 at Rs. 3.48 Crore. The Petitioner further submitted that the Commission has been approving such expenses on actual basis in its preceding Tariff Orders as evident from the following extract of its Tariff Order dated September 03, 2019: -

Quote:

3.22.2The Commission is of the view that due to fast obsolescence and normal wear and tear, some of the assets may be required to be scrapped before their useful life. Hence, the loss on sale of assets incurred due to disposal of such scrap assets is genuine and legitimate business expenditure and therefore, the Commission approves miscellaneous expenditure at Rs. 0.83 Crore as per the audited Accounts of the Petitioner for FY 2017-18.

Unquote:

6.14.2 The Petitioner further submitted that the Commission in the its Tariff Order dated December 04, 2020 while truing up loss on Sale of Fixed Assets under Miscellaneous expenses stated as follows: -

Quote:

3.21.4 As regards to the Miscellaneous Expenses, the Commission noticed that the Petitioner has claimed Rs. 0.74 Crore as Loss on sale of Fixed Assets in Miscellaneous expenses. In this regard the Commission sought the following details:

i. Name of the Asset.

ii. Asset Installation date.

iii. Useful Life of the Asset.

iv. Depreciation claimed on the asset till date.

v. Whether depreciation claimed till 90%.

The Petitioner submitted the reconciliation for the same as shown in the Table 51 below:

Table 51: Reconciliation of Loss on Sale of Asset as submitted by the Petitioner for FY 2018-19

Table 51: Reconciliation of Loss on Sale of Asset as submitted by the Petitioner for FY 2018-19			
Sl. No.	**Description**	**Amount (Rs. Cr.)**	**Remark**
1	Gross value of Assets disposed/retired	4.30	Please refer to Note-3 of Audited Accounts
2	Less: Accumulated Depreciation on Assets retired	3.23	Please refer to Note-31 of Audited Accounts
3	**WDV of Assets Retired**	**1.07**	
4	Less: Sale Proceeds	0.33	
5	**Loss on Sale of Assets**	**0.74**	

3.21.5 The MYT Regulations, 2014 provides that:

Quote

33 Non-Tariff Income

(a) All incomes being incidental to electricity business and derived by the Licensee from sources, including but not limited to profit derived from disposal of assets, rents, delayed payment surcharge, meter rent (if any), income from investments other than contingency reserves, miscellaneous receipts from the consumers and income to Licensed business from the Other Business of the Distribution Licensee shall constitute Non-Tariff Income of the Licensee.

Unquote

3.21.6 The Regulation provides for consideration of profit derived from disposal of assets to be considered under Non-Tariff Income. Hence the loss derived on disposal of asset is not the part of ARR effectively. Also whenever an asset is retired / scrapped before there useful life, the Commission approves the decapitalisation and also the additional capex for replacement of such asset in the GFA and the same is approved in the ARR. Hence the allowance of such loss on sale of fixed asset will be an additional burden on the consumers. The Commission allowed the said expenditure in True Up of FY 2017-18; however, the Commission does not intend to disturb the True Up of FY 2017-18. Hence the Commission for the True Up of FY 2018-19 disallows the loss on sale of fixed asset.

Unquote

6.14.3 However, the Commission while approving ARR for FY 2022-23 vide Tariff Order dated July 20, 2022 did not approve the loss on sales of asset for FY 2022-23 as claimed by the Petitioner. The denial of its claim of loss on sale of assets, leave the Petitioner with lesser money to reinvest in additional / replacement capex as well as lesser capacity to borrow, which if continued will adversely affect the consumers, as licensee may not be able to timely replace / create necessary distribution infrastructure.

6.14.4 The Petitioner also submitted that the retirement / sale of non-reparable / damaged / inefficient fixed asset also necessary for safety as well as efficient power distribution operations. Accordingly, the Petitioner requested the Commission to approve the loss on sale of fixed assets as depicted in below table: -

TABLE 6-109: OTHER MISCELLANEOUS ITEMS (FY 2023-24) (Rs. Crore)

Sl. No.	Description	Estimated
1	Loss on sales of assets	3.48
2	Impact of GST	-
3	**Total**	**3.48**

Commission's Analysis

6.14.5 The Commission observed that the Petitioner has claimed Rs. 3.48 Crore towards loss on sale of Fixed Assets under Miscellaneous expenses. The Commission vide deficiency letter dated January 06, 2023 sought working of the same along with basis for computation of Rs. 3.48 Crore. The Petitioner in its reply submitted that based on the actual amount of assets retired during the previous years, it has estimated loss of Rs. 3.48 Crore on sale of fixed asset during FY 2023-24 subject to truing up as per audited accounts.

6.14.6 The Commission is of the view that the MYT Regulation provisioned that 90% of the assets value to be covered though deprecation value, whereas the remaining 10% will be scrap value and to be recovered through sale of the assets. Further, the Commission emphasis that the deprecation rate is defined in the MYT Regulations, 2019 to recover the 90% of the asset value, only when the asset is put to use for its useful life. In case the asset is removed from the system before the useful life due to any reason and not put to use, the Commission is of the view that the consumer is not liable to pay for the same. Thus, any loss or gain on part of sale of asset for the assets which are removed from the system before the serving the useful life is on the part of Petitioner. Accordingly, the Commission is not allowing any loss on retirement / impairment of assets for FY 2023-24.

6.15 CONTINGENCY RESERVE

Petitioner's Submission

6.15.1 The Petitioner submitted that Regulation 27 of MYT Regulations, 2019 specifies in respect of Contingency Reserve as: -

Quote

27. Contribution to Contingency Reserve
27.1 Where the Licensee has made a contribution to the Contingency Reserve, a sum not less than 0.25% and not more than 0.5% of the original cost of fixed assets may be allowed annually towards such contribution in the calculation of ARR:
Provided that where the amount of such Contingency Reserves exceeds five (5) per cent of the original cost of fixed assets, no further contribution shall be allowed:
Provided further that such contribution shall be invested in securities authorised under the Indian Trusts Act, 1882 within a period of six months of the close of the Year.
27.2 The Contingency Reserve shall not be drawn upon during the term of the Licence except to meet such charges as may be approved by the Commission as being:
(a) Expenses or loss of profits arising out of accidents, strikes or circumstances which the management could not have prevented;
(b) Expenses on replacement or removal of plant or works other than expenses requisite for normal maintenance or renewal;
(c) Compensation payable under any law for the time being in force and for which no other provision is made.
……..

Unquote

6.15.2 The Petitioner submitted that the Commission in its Tariff Order dated October 19, 2012 had not allowed the provision of contingency reserve to reduce extra burden on the consumers. However, contingency reserve is created to meet the eventualities in the nature of major calamities, act of God etc. and thereby, causing huge loss to the network. In any case, the amount so allocated, can be used with prior permission of the Commission. Therefore, the Petitioner has considered creation of contingency reserve in ARR for FY 2023-24 at lower limit of 0.25% of Opening Gross Fixed Asset as per the MYT Regulations, 2019 as shown in Table below: -

TABLE 6-110: CONTINGENCY RESERVE AS SUBMITTED BY THE PETITIONER FOR FY 2023-24 (RS. CRORE)

Sl. No.	Particulars	Projected
1	Opening GFA	2,144.36
2	Contribution to Contingency Reserve	5.36
3	% of Opening GFA	0.25%

Commission's Analysis

6.15.3 The Commission in the past Tariff Orders have been disallowing the Contribution to Contingency Reserve as the same would put additional burden on the consumers. Continuing the same approach, the Commission for FY 2023-24 has not approved any fund for contingency reserve.

6.16 PROVISION FOR WRITE OFF OF BAD AND DOUBTFUL DEBTS

Petitioner's Submission

6.16.1 The Petitioner submitted that considering the estimated sales, collection efficiency as projected and in view of the debtors profile, prudent analysis, impending political scenario affecting the collections drives and ageing profile of receivables, the Petitioner has estimated the Provision for Write-off of Bad and Doubtful Debts for FY 2023-24 as 2% in accordance to Regulation 46 of MYT Regulations, 2019 as shown below: -

TABLE 6-111: PROVISION FOR BAD & DOUBTFUL DEBT AS SUBMITTED BY THE PETITIONER FOR FY 2023-24 (RS. CRORE)

Sl. No.	Description	Ref.	Projected
1	Revenue billed for the year	a	2378.83
2	Add: Electricity Duty @ 4.73%	b	112.99
3	Gross Revenue billed for the year	c=a+b	2491.83
4	**Provision for Bad & Doubtful debts**	**e**	**49.84**

Sl. No.	Description	Ref.	Projected
5	Provision as % of Revenue billed	f=e/c	2.00%

6.16.2 The Petitioner submitted that the above Provision for Write-off of Bad and Doubtful Debts is projected in accordance with the Petitioner's policy which has also been approved by the Commission in its Tariff Orders. Actual write off will be considered upon ascertaining that the consumer account has no chance of revival and the avenues of recovery are fully exhausted. At the time of actual write off, bad debts are identified against each individual defaulting consumer and subsequently aggregated. In each such instance, supply will stand permanently disconnected and the service apparatus removed as per the Petitioner policy.

6.16.3 The Petitioner added that the estimated provision for Write-off of Bad and Doubtful Debts is within the norm as provided in MYT Regulations, 2019. Therefore, the Commission is requested to approve and consider the same for determination of ARR FY 2023-24.

Commission's Analysis

6.16.4 The Regulation 46 of the MYT Regulation, 2019 provides as follows:

Quote

46 Provision for Write off of Bad and Doubtful Debts

46.1 For any Year, the Commission may allow a provision for write off of bad and doubtful debts up to 2% of the amount shown as Revenue Receivables from sale of electricity in the audited accounts of the Distribution Licensee for that Year or the actual write off of bad debts, whichever is less:

Provided further that such provision allowed by the Commission for any Year shall not exceed the actual provision for write off of bad and doubtful debts made by the Distribution Licensee in the audited accounts of that Year:

Provided that the Commission, in its ARR / Tariff Order, may provisionally approve provision for write off of bad and doubtful debts based on the actual provision for write off of bad and doubtful debts made by the Distribution

Licensee in the latest Audited Accounts available for the Petitioner, and as allowed by the Commission:

Provided further that if subsequent to the write off of a particular bad debt, revenue is realised from such bad debt, the same shall be included under the Non-Tariff Income of the year in which such revenue is realised.

Unquote

6.16.5 The Commission observed that the Petitioner has claimed bad & doubtful debt for FY 2023-24 as Rs. 49.83 Crore which is around 172% rise as compared to bad & doubtful debt claimed for FY 2021-22. In this regard the Commission vide letter dated January 06, 2023 sought justification from the Petitioner for claiming such high amount. In reply to the query, the Petitioner submitted that it has claimed the bad & doubtful debts for FY 2023-24 in accordance with Regulation 46 of MYT Regulations, 2019. The Petitioner further emphasis that it has considered the estimated sales, collection efficiency as projected in Business Plan and in view of the debtors profile, prudent analysis, impending political scenario affecting the collections drives and ageing analysis of receivables for FY 2022-23 and past periods it has estimated the Provision for Write-off of Bad and Doubtful Debts for FY 2022-23 as provided in Table below:-

Table 6-112: Provision for Bad & Doubtful Debts (FY 2022-23) (Rs. Crore)

Sl. No.	*Description*	*Approved*	*Estimated*
1	*Revenue billed for the year*	*2229.86*	*2,272.06*
2	*Add: Electricity Duty @ 4.75%*	*0.00*	*107.92*
3	***Gross Revenue billed for the year***	***2,229.86***	***2,379.98***
4	***Provision for Bad & Doubtful debts***	***22.51***	***47.59***
5	*Provision as % of Revenue billed*	*1.01%*	*2.00%*

6.16.6 The Commission for approval of provision for bad and doubtful debt has considered the actual percentage of provision for write off of bad debt approved in True Up of FY 2021-22 i.e. 0.90% (excluding electricity duty). Further, the Commission will carry out the Truing-Up of bad debts subject to actual writing off of the bad debts during the year, as per audited accounts.

TABLE 6-113: PROVISION FOR WRITE OFF FOR BAD AND DOUBTFUL DEBTS AS APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Particular	ARR Petition	Approved
Revenue billed during the year	2378.83	2413.23
Provision as % revenue billed claimed	2.09%	0.90%
Provision of bad and doubtful debt	49.83	21.75

6.17 NON-TARIFF INCOME

Petitioner's Submission

6.17.1 The Petitioner submitted that Regulation 47 of MYT Regulations, 2019 provides for consideration Non-Tariff Income in ARR as follows: -

Quote

47. Non-Tariff Income

47.1 The amount of Non-Tariff Income relating to the Distribution Business as approved by the Commission shall be deducted from the ARR in determining the Tariff for retail supply and Wheeling Charges of the Distribution Business:

Provided that the Distribution Licensee shall submit full details of its forecast of Non-Tariff Income to the Commission in such form as may be stipulated by the Commission.

47.2 The Non-Tariff Income shall include:

a) Income from rent of land or buildings;

b) Income from sale of scrap;

c) Income from investments;

d) Interest income on advances to suppliers/contractors;

e) Interest income on loans / advances to employees;

f) Income from rental from staff quarters;

g) Income from rental from contractors;

h) Income from hire charges from contactors and others;

i) Income from delayed payment surcharge, supervision charges, etc.;

j) Supervision charges for capital works;

k) Income from recovery against theft and/or pilferage of electricity;

l) Income from advertisements;

m) *Income from sale of tender documents;*

n) *Excess found on physical verification;*

o) *Prior Period Income;*

p) *Miscellaneous receipts; and*

q) *Any other Non-Tariff Income:*

Provided that the interest earned from investments made out of Return on Equity corresponding to the regulated Business of the Distribution Business shall not be included in Non-Tariff Income.

Unquote

6.17.2 Accordingly, the Income from delayed payment surcharge and other miscellaneous receipts incidental to business of electricity supply during FY 2023-24 is summarized in Table below: -

TABLE 6-114: NON-TARIFF INCOME SUBMITTED BY THE PETITIONER FOR FY 2023-24 (Rs. Crore)

Sl. No.	Particulars	Projected
1	Income from Contingency Reserves Investments	0.16
3	Miscellaneous Receipts from other sources	3.79
4	Delayed Payment Surcharge	4.80
5	**Total Non-Tariff Income**	**8.75**

6.17.3 The Petitioner submitted that the other income as shown above excludes income from treasury operations as such income is generated upon the funds accrued through internal resources over earlier years. Since, such incomes are generated out of its utilization of internal funds which are not the part of licensed business the same has not been considered as part of ARR.

Commission's Analysis

6.17.4 The Commission for the purpose of this Order has considered the Non-Tariff Income for FY 2023-24 same as approved by the Commission while truing up of FY 2021-22 in this Order. Further, any variation on this account would be taken up at the time of True-Up. Accordingly, the Commission approves Non-Tariff Income for FY 2023-24 as shown in the Table below: -

TABLE 6-115: NON-TARIFF INCOME APPROVED FOR FY 2023-24 (Rs. Crore)

Particular	ARR Petition	Approved
Non-Tariff Income including DPS	10.79	-
Less: Cost of Borrowing for DPS	(2.04)	-
Net Non-Tariff Income	**8.75**	**36.90**

6.18 SUMMARY OF ARR FOR FY 2023-24

6.18.1 Based on the above approved values, the summary of ARR approved by the Commission for FY 2023-24 is shown in Table below: -

TABLE 6-116: SUMMARY OF ARR APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Particulars	FY 2023-24	
	Petition	Approved
Power Purchase Expenses	1820.72*	1816.45
Transmission Charges (UPPTCL+PGCIL)	324.30	280.02
Employee cost	91.12	34.60
A&G expenses	29.36	18.21
R&M expenses	46.84	49.12
Smart Metering / DT Metering / SOP implementation OPEX	25.54	0.00
Gross O&M Expenses	**192.85**	**101.92**
Interest Charges	76.75	60.20
Depreciation	74.79	52.50
Contingency Reserve	5.36	0.00
Income Tax	29.01	20.91
Gross Expenditure	**2,523.78**	**2,332.00**
Employee cost capitalized	12.00	12.00
Interest capitalized	0.00	0.00
A&G expenses capitalized	0.00	0.00
Net Expenditure	**2,511.78**	**2,320.00**
GST Impact	0.00	0.00
Provision for Bad & Doubtful debts	49.83	21.75
Miscellaneous Expenses	3.48	0.00
Total net expenditure with provisions	**2,565.09**	**2,341.75**
Add: Reasonable Return / Return on Equity	86.26	62.17
Less: Non-Tariff Income	10.68	36.90
Add: Efficiency Gains	0.00	0.00
Aggregate Revenue Requirement (ARR)	**2,640.67**	**2,367.02**
Revenue from approved Tariff	2644.95	2681.36
Tariff revision impact (10% Regulatory Discount)	266.12	268.14
Revenue Gap / (Surplus)	**261.84****	**(46.21)**

** Power Purchase Expenses (Short Term power- Exchange) is revised in its reply. ** Due to change in Power Purchase Expenses, the net Revenue Gap / (Surplus) status change from Rs. 248.04 Crore to Rs. 261.84 Crore.*

6.18.2 Analysis of few parameters is depicted below:

TABLE 6-117: SUMMARY OF FY 2023-24 (Rs. Crore)

Particulars	Units	Value
Total Sales	MU	3315.59
Revenue from Tariff	Rs. Crore	2681.36
Total Power Purchase (Ex-Bus)	MU	3,844.04
Total Power Purchase (NPCL Periphery)	MU	3,589.47
Total Power Purchase Cost including Inter & Intra State Transmission Charges	Rs. Crore	2096.47
ARR	Rs. Crore	2367.02
APPC without Transmission (at NPCL Periphery)	Rs./kWh	5.06
APPC including Transmission (Inter + Intra) (at NPCL Periphery)	Rs./kWh	5.84
ABR without Regulatory Discount	Rs./kWh	8.09
ACoS	Rs./kWh	7.14

7 OPEN ACCESS CHARGES

7.1 BACKGROUND

7.1.1 In regard to Open Access, the Commission has finalized the necessary regulatory framework as below:

- UPERC (Terms and Conditions for Open Access) Regulations, 2019 that includes among others, the detail procedure (s) for Long-Term Open Access, Medium term Open Access and Short-Term Open Access for use of Distribution system, with or without transmission system;
- Procedures for Forecasting, Scheduling and Deviation Settlement of Solar and Wind Generation Sources, 2020.

7.1.2 The Electricity Act, 2003 has defined Open Access as non-discriminatory provision for use of transmission lines or distribution system or associated facilities thereof. Considering the operation constraints and other relevant factors, the Commission directs that the Open Access shall be allowed to those who wish to avail Open Access as per the provisions outlined by the Commission in its Regulations, Orders and any amendments from time to time.

7.1.3 The Commission has finalized the model Bulk Power Transmission Agreement (BPTA) and Bulk Power Wheeling Agreement (BPWA) for availing transmission and distribution services, which is to be signed in regard to payment of wheeling charge, transmission charges, surcharge and additional surcharge etc. by the Long-Term Open Access customer.

7.1.4 Further, the Regulation 18.3 of UPERC (Fees & Charges of State Load Despatch Centre and other related matters) Regulations, 2020 provides the application fee for Short Term Open Access and Operating Charges for Short-Term Open Access.

7.2 OPEN ACCESS TRANSMISSION CHARGES

7.2.1 The Commission in the Tariff Order for FY 2023-24 of UPPTCL determines the Transmission Charges payable by Open Access customers for use of UPPTCL transmission network for transmission of electricity.

7.2.2 Similarly, the Commission also determines the wheeling charges payable by the

Open Access customers for utilising the distribution network of the Distribution Licensees for wheeling of electricity in subsequent section.

7.3 OPEN ACCESS WHEELING CHARGES

Petitioner's submission

7.3.1 The Company has been maintaining its cost accounts and records as prescribed by the Companies (Cost Records and Audit) Amendment Rules, 2014 {Amendment by G.S.R. 695(E) and called Companies (Cost Records and Audit) Amendment Rule, 2016} issued by Government of India. The cost accounts and records so prepared has been verified and audited by a qualified Cost Accountant in accordance with provisions of Section 148 of the Companies Act, 2013 and duly approved by the Board of Directors of the Company.

7.3.2 The methodology adopted in preparation of cost records is comparable with the methodology suggested under Regulation 39 of MYT Regulations, 2019, barring some differences in the nomenclature / terminology for segregating the cost as elaborated below:

i) As per the MYT Regulations, 2019, demand costs are the cost of fixed nature, related to capacity creation which includes interest on capital borrowing, depreciation on assets with fixed nature etc. On the similar lines, the Company, in its Cost Records, is allocating such costs of fixed nature under the head "Distribution Cost also known as "Wheeling Cost". These costs are further allocated to their respective consumer category who are demarcated based on their respective voltage at which they are being served e.g. the Depreciation charged at each voltage level has been allocated on the basis of capex actually incurred with respect to each voltage. Similarly, all related cost with respect to creation/ building of capacity like Interest on Term Loan, RoE etc. are being allocated on the same basis.

ii) "Customer" in the MYT Regulation, 2019 includes operating expenses associated with meter reading, billing and accounting, all these costs are covered under the head named as "Cost of Supply" being termed as "Retailing" in the cost records prepared by the Company. Further, the allocation of cost is being done based on the voltage wise categorization of consumers, hence, costs such as advertisement, billing expenses etc. has been segregated voltage wise on the basis of number of consumers.

iii) "Energy", in the MYT Regulations, 2019 are concerned with quantum of electricity consumption of consumer, such as fuel cost, interest on working capital, etc., this again forms a part of "Cost of Supply" also known as "Retailing". Further, these costs like Interest on working capital including processing fees for working capital facilities is being allocated on the basis of their respective consumption in the respective voltage category in the records.

7.3.3 The aforesaid methodology has been explained in detail in the audited cost records for FY 2021-22. Based on the above, the Petitioner has done the allocation as under:

Particulars	Wheeling Cost	Retailing Cost	Total
R&M Expenses	85%	15%	100%
Employees Expenses	59%	41%	100%
A&G Expenses	58%	42%	100%
Debits, Write-offs and any other items	0%	100%	100%
Depreciation	89%	11%	100%
Interest	100%	0%	100%
Carrying Cost of Regulatory Asset	97%	3%	100%
Taxes	90%	10%	100%
Return on Equity	90%	10%	100%
Total Cost of Service	**78%**	**12%**	**100%**

7.3.4 Further, the Petitioner submitted the allocations of ARR into wheeling and retail supply for FY 2023-24 as shown in the Table below:

TABLE 7-1: WHEELING AND RETAIL SUPPLY ARR SUBMITTED BY THE PETITIONER FOR FY 2023-24

Particulars	Allocation %			Allocation			
	Wheeling	Energy	Supply	Wheeling	Energy	Supply	Total
Cost of Power Procurement	0%	100%	0%	-	1,806.92	-	1,806.92
Transmission and Load Dispatch Charges	0%	100%	0%	-	324.30	-	324.30
Net O&M Expenses				**295.41**	**-**	**64.11**	**359.52**
Net Employee cost	59%	0%	41%	46.98	-	32.14	79.12
Net A&G expenses	58%	0%	42%	17.13	-	12.23	29.36
R&M expenses	85%	0%	15%	61.54	-	10.83	72.38
Smart Metering OPEX	85%	0%	15%	-	-	-	-
Net Interest & Finance charges	100%	0%	0%	76.75	-	0.00	76.75
Depreciation	89%	0%	11%	66.70	-	8.09	74.79
Carrying cost	97%	0%	3%	26.30	-	0.82	27.12
Gross Expenditure				**295.41**	**2,131.21**	**64.11**	**2,490.73**
Provision for Bad & Doubtful debts	0%	0%	100%	-	-	49.83	49.83
Provision for Contingency Reserve	0%	0%	100%	-	-	5.36	5.36
Total net expenditure with provisions				**295.41**	**2,131.21**	**119.29**	**2,545.92**
Add: Return on Equity	100%	0%	0%	86.26	-	-	86.26
Add : Income Tax	100%	0%	0%	29.01	-	-	29.01
Add : Other Item	0%	0%	100%	-	-	3.48	3.48
Less: Non Tariff Income	100%	0%	0%	-	-	-	-
Aggregate Revenue Requirement (ARR)				**410.68**	**2,131.21**	**122.77**	**2,664.67**

7.3.5 Based on the above, the wheeling charges submitted by the Petitioner for FY 2023-24 is as shown in the Table below:

TABLE 7-2: WHEELING CHARGES SUBMITTED BY THE PETITIONER FOR FY 2023-24

S. No	Particulars	Units	Claimed
1	Wheeling ARR	Rs. Crores	410.68
2	Retail sales	MU	3039.13
3	Average Wheeling charge	Rs. /kWh	1.35

7.3.6 The voltage wise wheeling charges submitted by the Petitioner for FY 2023-24 is as shown in the Table below:

S. No.	Particulars	Units	% of Avg. wheeling charge	Claimed
1	Connected at 11 kV			
I	Long Term	Rs./kWh	100%	1.38
Ii	Medium Term	Rs./kWh	100%	1.38
Iii	Short Term	Rs./kWh	100%	1.38
2	Connected above 11 kV			
I	Long Term	Rs./kWh	100%	0.75

S. No.	Particulars	Units	% of Avg. wheeling charge	Claimed
Ii	Medium Term	Rs./kWh	100%	0.75
Iii	Short Term	Rs./kWh	100%	0.75

Commission's Analysis

7.3.7 The Commission has considered the allocation as per the Licensee and has approved the wheeling and retail supply ARR for FY 2023-24 as shown in the Table below:

TABLE 7-3: WHEELING AND RETAIL SUPPLY ARR APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Particulars	Allocation %		Allocation FY 2023-24		
	Wheeling	Supply	Wheeling	Supply	Total
Power Purchase Exp. (incl PGCIL charges)	0%	100%	0.00	1816.45	1816.45
Transmission Charge	0%	100%	0.00	280.02	280.02
Employee cost	59%	41%	20.54	14.05	34.60
A&G expenses	58%	42%	10.62	7.58	18.21
R&M expenses	85%	15%	41.77	7.35	49.12
Interest & Finance charges	100%	0%	60.20	0.00	60.20
Depreciation	89%	11%	46.82	5.68	52.50
Income Tax	100%	0%	20.91	0.00	20.91
Gross Expenditure			**200.87**	**2131.13**	**2332.00**
Expense capitalization			**7.13**	**4.87**	**12.00**
Employee cost capitalized	59%	41%	7.13	4.87	12.00
Net Expenditure			**193.74**	**2126.26**	**2320.00**
Provision for Bad & Doubtful debts	0%	100%	0.00	21.75	21.75
Miscellaneous Expenses	100%	0%	0.00	0.00	0.00
Total net expenditure with provisions			**193.74**	**2148.00**	**2341.75**
Add: Return on Equity	100%	0%	62.17	0.00	62.17
Less: Non-Tariff Income	100%	0%	36.90	0.00	36.90
Annual Revenue Requirement (ARR)	9%	91%	**219.01**	**2148.00**	**2367.01**

7.3.8 Based on the above, the wheeling charge for FY 2023-24 has been worked out by the Commission as shown in the Table below:

TABLE 7-4: WHEELING CHARGE APPROVED BY THE COMMISSION FOR FY 2023-24 (WC)

Particulars	Units	Approved
Wheeling ARR	Rs. Crore	219.01
Retail sales	MU	3315.59
Average Wheeling charge	Rs. /kWh	0.6606

7.3.9 The wheeling charges determined above shall not be payable if the Open Access customer is availing supply directly through the State transmission network.

7.3.10 In addition to payment of wheeling charges, the open access customers also have to bear the wheeling losses in kind.

7.4 CROSS SUBSIDY SURCHARGE (CSS)

Petitioner's submission

7.4.1 The Commission in its Tariff Order for FY 2022-23 dated July 20, 2022 had approved the cost of supply for FY 2022-23 for the purpose of computation of CSS.

7.4.2 As per the methodology specified in Regulation 49 of MYT Regulations, 2019 the CSS for the relevant consumer categories is computed using the following formula:

S= T – [C/ (1-L/100) + D+ R]

Where:

S is the Cross Subsidy Surcharge;

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation;

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation;

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level;

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level;

R is per unit carrying cost of regulatory assets:

7.4.3 The Petitioner submitted that for the purpose of determination of CSS as per above methodology the avoidable cost of supply of the Open Access consumers for FY 2023-24 is provided in the table below, which shall be applied against the tariff applicable for the relevant consumer category for computation of Cross subsidy surcharge as and when any consumer applies for the same. The CSS for FY 2023-24 at existing and proposed tariff is as shown in the Table below:

TABLE 7-5: CSS AS SUBMITTED BY THE PETITIONER FOR FY 2023-24 (Rs. /kWh)

Sl. No	Categories	Avg. Rate	Wh. Cost	Carrying Cost	Wt. Avg Pur. Cost	System Loss	Total Cost	Cross Subsidy Surcharge
		(T)	(D)	(R)	(C)	(L)	[C /(1- L / 100) + D+R]	(S)=(T)-[C (1+ L / 100) + D+R]
----------- 33 kV -----------								
1	Large & Heavy Power (HV-2)	**7.44**	0.68	0.08	5.94	2.42%	6.84	0.60
----------- 11 kV -----------								
2	Non Industrial Bulk Load (HV-1)	**9.73**	1.30	0.08	5.94	6.02%	7.70	2.03
3	Large & Heavy Power (HV-2)	**8.26**	1.30	0.08	5.94	6.02%	7.70	0.57
----------- LT-------------								
4	Domestic Light, Fan & Power (LMV-1)	**6.75**	1.86	0.10	5.94	18.45%	9.24	-
5	Non - Domestic Light, Fan & Power (LMV-2)	**11.20**	1.86	0.10	5.94	18.45%	9.24	1.96
6	Public Lamps (LMV-3)	**9.38**	1.86	0.10	5.94	18.45%	9.24	0.15
7	Light ,Fan & Power for Institutions (LMV-4)	**9.93**	1.86	0.10	5.94	18.45%	9.24	0.69
8	Small Power for Private Tubewell (LMV-5)	**2.39**	1.86	0.10	5.94	18.45%	9.24	-
9	Small and Medium Power (LMV-6)	**9.52**	1.86	0.10	5.94	18.45%	9.24	0.28
10	Public Water Works (LMV-7)	**10.28**	1.86	0.10	5.94	18.45%	9.24	1.04
11	Temporary Supply (LMV-9)	**10.07**	1.86	0.10	5.94	18.45%	9.24	0.84
12	Electric Vehicle Charging (LMV-11)	**7.14**	1.86	0.10	5.94	18.45%	9.24	-
13	State Tube Wells (LMV-8)	-	1.86	0.10	5.94	18.45%	9.24	-

Commission's Analysis

7.4.4 The Commission has computed the CSS based on the provisions of Regulation 49.2 of the MYT Regulations, 2019. For the purpose of computation of CSS, as per the formula, D needs to be computed, where D is the aggregate of transmission, distribution and wheeling charges applicable to the relevant voltage level. The Commission has considered Wheeling Charges (WC) as approved above, Transmission Charges – Inter-State Charges (PC) & Intra State Charges (TC), Retail Supply / Distribution Charges (DC). Accordingly, only for the purpose of computation of D, i.e. aggregate of Transmission, Distribution and Wheeling Charges applicable to the relevant voltage levels, the Commission has computed (DC), (TC), (PC) in the tables below:

TABLE 7-6: DISTRIBUTION / RETAIL SUPPLY CHARGES FOR COMPUTATION OF 'D' FOR FY 2023-24 (DC)

Particulars	Units	Approved (FY 2023-24)
Supply ARR (excluding Power Purchase & Transmission charges) (A)	Rs. Crore	51.54
Retail sales (B)	MU	3315.59
Average Supply/Distribution charge (DC) ((A/B) *10)	Rs. /kWh	0.16

TABLE 7-7: INTRA-STATE TRANSMISSION CHARGES FOR COMPUTATION OF 'D' FOR FY 2023-24 (TC)

Particulars	Units	Approved
Transmission Cost (A)	Rs. Crore	91.82
Energy Handled in Open Access (Retail Sales) (B)	MU	3315.59
Average Transmission Charge (TC) ((A/B) * 10)	Rs. /kWh	0.2769

TABLE 7-8: AVERAGE TRANSMISSION CHARGE (EXCLUDING INTRA) FOR COMPUTATION OF 'D' FOR FY 2023-24 (PC)

Particulars	Units	Approved
Transmission Cost (A)	Rs. Crore	188.20
Energy Handled in Open Access (Retail Sales) (B)	MU	3315.59
Average Transmission Charge (excluding UPPTCL) (PC) ((A/B)*10)	Rs. /kWh	0.5676

Table 7-9: AVERAGE OF TRANSMISSION, DISTRIBUTION & WHEELING CHARGES, APPLICABLE TO RELEVANT VOLTAGE LEVEL FOR FY 2023-24 (D = PC + TC + DC + WC)

Particulars	Units	Approved
PC+ TC + DC + WC upto 132 kV	Rs. /kWh	1.66
TC+PC (above 132 kV)	Rs. /kWh	0.84

7.4.5 Further, the formula provides for computation of 'L', where 'L' is the aggregate of transmission, distribution and commercial loss, expressed as a percentage applicable to the relevant voltage level. The voltage wise losses provided by the Petitioner in Form P1 of the tariff formats is as shown in the Table below:

TABLE 7-10: DISTRIBUTION LOSS AT VARIOUS VOLTAGE LEVELS AS SUBMITTED BY THE PETITIONER FOR FY 2023-24

Voltage Level	Loss (%)
33 KV and above	2.31%
11 KV	5.94%
LT	18.68%
Overall total loss	7.63%

7.4.6 The Commission directed the Petitioner to submit the voltage wise wheeling charge and Losses as per Format P1 for FY 2021-22, FY 2022-23, FY 2023-24 for voltage level 220kV, 132kV, 33kV, 11KV, LT and reconcile the same with cross-subsidy calculation at various voltage levels in Format 40A.

7.4.7 In reply, the Petitioner submitted that at present, it has only one consumer viz M/s Oppo Mobiles connected at 132 kV level through dedicated line from UPPTCL's 220/132 kV Substation at Sec-148 further it has been requesting UPSLDC / UPTCL for sharing the metering information at 220/132 kV substation at Sector-148, Noida which is still awaited. For the purpose of preparing P1 (voltage wise summary), the metering information at consumer premises has been used as the input energy at 132 kV and hence, no losses have been considered at 132 kV level for FY 2021-22 in RTF P1.

7.4.8 The Petitioner has provided the voltage-wise losses in format P -1 for 33 kV, 11 kV and LT only. Further, the petitioner stated that the losses as mentioned in Form F40A has some inadvertently error due to which the same is not reconciled with losses as shown in Form P-1 and provided the duly reconciled Form F40A and Form P-1.

7.4.9 The Commission has considered the loss at 11 kV & 33 kV as submitted as per Format P1 in the table above, which are lower. Further, it has been observed that the Petitioner has proposed additional of consumers at 132 kV voltage level, but has not submitted the losses at 132 kV (above 33 kV) & 220 kV (above 132 kV) voltage levels. Hence, for the purpose of computation, the Commission has considered the losses similar to the losses of State owned Discoms as all the Licensees are within the State and share boundaries too.

7.4.10 The Commission in the Tariff Order or FY 2023-24 of State Discoms has corrected distribution losses at different voltage level. Based on the approach adopted by the Commission in the Tariff Order of State Discoms, distribution losses of NPCL for computation of cross subsidy has been considered revised.

7.4.11 Accordingly, the voltage wise loss at each voltage level considered for computation of CSS is as shown in the Table below:

TABLE 7-11: VOLTAGE WISE LOSSES APPROVED BY THE COMMISSION FOR COMPUTATION OF CSS FOR FY 2023-24

Particulars	Loss Levels
Inter State Transmission Loss (PGCIL)	3.52%
Intra State Transmission Loss (UPPTCL)	3.22%
Distribution Loss above 132 KV (220)	3.00%
Distribution Loss above 33 KV (132 kV, 66 kV)	3.00%
Distribution Loss at 33 KV (above 11 kV)	4.00%
Distribution Loss at 11 kV Loss	6.00%
Overall Distribution Loss	7.63%

7.4.12 The above losses are solely for the purposes of computation of CSS. However, for billing purpose of open access consumers, actual losses will be considered.

7.4.13 The computation of Inter-state transmission loss for the purpose of computation of CSS is as under:

TABLE 7-12: INTER-STATE TRANSMISSION LOSS FOR THE PURPOSE OF COMPUTATION OF CROSS SUBSIDY SURCHARGE

Particulars	Unit	Derivation	Consolidated
Retail Sales	MU	A	3,315.59
Distribution Losses	%	B	7.63%
Energy at Discom Periphery for Retail Sales	MU	C=A/(1-B)	3,589.47
Intra-State Transmission Losses	%	D	3.22%
Energy available at State Periphery for Transmission	MU	E=C/(1-D)	3,708.90
Inter-State Transmission Loss*	%	F=1-E/G	3.52%
Power Purchase Required & Billed Energy (MU) (Ex-Bus)	MU	G	3,844.08

** This computation is for the purpose of computing the CSS only and has been done by taking into consideration the total Ex-bus transmitted energy and the energy requirement at the State periphery which is inclusive of Inter-State and Intra-State sources*

7.4.14 As per the formula provided in the MYT Regulations, 2019 the details of Cost of Supply for the category of consumers at various voltage level is given below:

TABLE 7-13: COST OF SUPPLY AS COMPUTED BY THE COMMISSION FOR FY 2023-24 (Rs./Kwh)

S No.	Categories	Wh. Charge (D= PC+TC+DC+WC)	Wt. Avg Power Purchase Fixed Cost (FC)	Wt. Avg Power Purchase Variable Cost (VC)	Wt. Avg. Pur Cost (C= FC+VC)	Transmission (PGCIL) Loss (L1)	Transmission (UPPTCL) Loss (L2)	Distribution Loss (L3)	R (per unit cost of carrying Regulatory Assets)	Total Cost of Supply = [C/((1-L1)*(1-L2)*(1-L3)) + D+ R]
1	HV Categories above 132 kV	0.84	1.05	3.68	4.73	3.52%	3.22%	3.00%	0.00	6.06
2	HV Categories above 33 kV (132, 66kV)	1.66	1.05	3.68	4.73	3.52%	3.22%	3.00%	0.00	6.88
3	HV Categories at 33 kV	1.66	1.05	3.68	4.73	3.52%	3.22%	4.00%	0.00	6.93
4	HV Categories at 11 kV	1.66	1.05	3.68	4.73	3.52%	3.22%	6.00%	0.00	7.04

where: L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

TABLE 7-14: CSS COMPUTED BY THE COMMISSION FOR FY 2023-24 (Rs. /Kwh)

Categories	Average Billing Rate (ABR) (Fixed +Variable)	T = ABR + RS (i.e., Regulatory Surcharge)	Cost of Supply	Cross Subsidy Surcharge "CSS" (Computed)	Cross Subsidy Surcharge "CSS" (as per MYT 19) (with a cap of 20% of T)
HV-1 (Supply at 11 kV)	8.37	8.37	7.04	1.33	1.33
HV-1 (Supply above 11 kV)	10.36	10.36	6.93	3.42	1.86
HV-2 (Supply at 11 kV)	8.34	8.34	7.04	1.29	1.29
HV-2 (Supply above 11 kV and upto 66kV)	7.60	7.60	6.93	0.67	0.67
HV-2 (Supply above 66 kV and upto 132kV)	7.23	7.23	6.88	0.36	0.36
HV-2 (Supply above 132 kV)	-	-	-	-	-

7.4.15 However, as per the Petitioner’s submission, the CSS computed for few categories/sub-categories comes out to be lower. As the same was published for the comments of the stakeholders & public at large, the Commission, to ensure that consumers are not adversely affected and get best rates possible, approves the lowers of its computations and Licensee’s proposal. The approved CSS for FY 2023-24 is as shown in the Table below:

TABLE 7-15: CSS APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. /Kwh)

Category	Claimed by the Petitioner	Computed	Approved
	A	B	Minimum of A,B
HV-1 (Supply at 11 kV)	2.03	1.33	1.33
HV-1 (Supply above 11 kV)	-	1.86	1.86
HV-2 (Supply at 11 kV)	0.57	1.29	0.57
HV-2 (Supply above 11 kV and upto 66 kV)	0.59	0.67	0.59
HV-2 (Supply above 66 kV and upto 132 kV)*	-	0.36	0.36
HV-2 (Supply above 132 kV)#	-	-	0.36

** The Petitioner has not proposed CSS for this category hence value computed by the Commission has been considered.*
 # The Petitioner has not proposed Cross Subsidy Surcharge for HV-2 (Supply above 132 kV) as well as the Billing Determinants have not been provided by the Licensee, hence the value of CSS for this category has been taken as approved HV-2 (Supply above 66 kV and upto 132 kV).

7.5 ADDITIONAL SURCHARGE

Petitioner's submission

7.5.1 Regulation 50 of the MYT Regulation, 2019 provides as under:

Quote

50 Additional Surcharge

50.1 The additional surcharge for obligation to supply as per Section 42(4) of the Act shall become applicable only if it is conclusively demonstrated that the obligation of a Licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract.

Unquote

7.5.2 The Petitioner submitted that the proposed Draft amendment to the Tariff Policy, 2016 provides a lot of emphasis on meeting of demand through LT PPA, 24X7 power for all and grant of full Open Access to consumers. The Petitioner added that for fulfilling the universal supply obligation, to adequate protect its consumers from the loss of revenue due to outgoing OA consumers, there is a need of time to allow the distribution licensee to recover Additional Surcharge from such open access consumer.

i) Under sub section (4) of section 42 of the Electricity Act 2003, DISCOMs have a universal supply obligation and are required to supply power as and when required by the consumers in its area of supply.

ii) Considering the sales forecast approved by the State Commission while determining Annual Revenue Requirement, the DISCOMs enter into long term / medium term / short term Power Purchase Agreements (PPAs) with sellers (generators/ traders etc.) so as to ensure supply of power for the envisaged increase in the load.

iii) While contracting energy through such long term / medium term PPAs, the tariff payable to the generators generally consists of two part i.e. capacity charges and energy charges. In case of short term PPAs, the same are based on single part tariff which invariably carries a covenant to procure at least 80-85% of the contracted supply or else the DISCOMs will have to pay compensation of 20% of the tariff per unit of the shortfall. Therefore, the DISCOMs have to bear the fixed cost or compensation even when there is no off take of energy through such source.

iv) Whenever any consumer opts for open access and takes supply through open access, the DISCOMs continue to pay fixed charges or compensation in lieu of its contracted capacity with generating stations. However, DISCOMs are unable to sufficiently recover such fixed cost or compensation obligation from the open access consumers.

v) The DISCOMs establish assets for supplying power to certain specific consumers. There may be certain cases wherein such assets become redundant. In such cases, fixed charges for such stranded assets should be borne by the customers as part of Additional Surcharge.

vi) Not only the Fixed Charge, compensation and network cost should form part of Additional Surcharge, a part of regulatory asset should also be included in the Additional Surcharge as regulatory asset was created when open access consumer was part of the system. Such consumer had enjoyed the benefit of suppressed tariff when regulatory asset was being created. Thus, when such consumer leave the tariff base of the DISCOMs, part of regulatory assets become stranded. Therefore, one of the component of Additional Surcharge should also cover for regulatory asset.

vii) The cost recovered from fixed charges in the tariff schedule is less than the fixed cost or compensation incurred by the DISCOM for supplying energy. This leads to the situation where the DISCOM is saddled with the stranded cost on account of its universal supply obligation.

viii) In view of the adverse financial situation caused by arrangements made for complying with the obligation to supply, Section 42 (4) of the Electricity Act, 2003 provides as under:

Quote

Where the State Commission permits a consumer or class of consumers to receive supply of electricity from a person other than the distribution licensee of his area of supply, such consumer shall be liable to pay an additional surcharge on the charges of wheeling, as may be specified by the State Commission, to meet the fixed cost of such distribution licensee arising out of his obligation to supply.

Unquote

ix) Section 8.5 of the Tariff Policy 2016 also provides;

Quote

The additional surcharge for obligation to supply as per section 42(4) of the Act should become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges.

Unquote

x) Clause 5.8.3 of the National Electricity Policy notified by the Ministry of Power, Govt. of India, reads as under:

Quote

5.8.3... An additional surcharge may also be levied under sub-section (4) of Section 42 for meeting the fixed cost of the distribution licensee arising out of his obligation to supply in cases where consumers are allowed open access…

Unquote

xi) Further, the Commission has also finalized the model BPWA which is to be signed between a Distribution Licensee and the long-term customer to agree therein, inter alia, to make payment of wheeling charge, surcharge and additional surcharge, if any, for use of the distribution system.

7.5.3 Ministry of Power, Government of India has issued draft of the amendments in Tariff Policy, 2016. One of the proposed draft amendment in Para 8.0 of the Tariff Policy, 2016 is as under:

Quote

It shall be mandatory for the Distribution Company to show to the respective Commission that they have tied up long term/ medium term PPAs to meet the annual average power requirement in their area of supply, failing which their license shall be liable to be suspended. 24 hours supply of adequate and uninterrupted power may be ensured to all categories of consumers by March, 2019 or earlier

Unquote

7.5.4 From the above proposed amendment, it will require to tie up its annual average power requirement through long term / medium term PPAs which will ultimately increase its obligation to pay the fixed charges under the long term / medium term PPAs. Further, with consumers frequently switching their mode of supply between Company and open access, it will become difficult for the Company to assess the quantum of power that will continue to remain stranded.

7.5.5 Further, the Commission notified the Open Access Regulations, 2019 clearly specifying the criteria and requirements for consumers opting for Open Access. Subsequent to the notification of the above regulations, the Company has observed a steep rise in consumers seeking Open Access in the State for purchasing power from the open market.

7.5.6 The power purchased under Open Access becomes even more lucrative when a consumer opts for renewable power as a source of supply due to various incentives given by the Commission and the Central/State Government. For instance, if a consumer opts to purchase solar power, the following incentives are provided by the Commission and the State Government:

- 50 % exemption on wheeling charges/transmission charges on intra-state Open Access.
- Exemption of electricity duty for 10 years for purchase of solar power from the project setup within the State.

7.5.7 Further, apart from the above exemptions, the consumers who have been opting for Group Captive route of Open Access are even getting waiver from payment of cross-subsidy surcharge as well. Also, all new industrial units producing electricity from captive power plants for self-use are exempted from payment of electricity duty for 10 years.

7.5.8 Therefore, the Company expects migration of consumers to Open Access from its licensed area. So far, the Company has granted Open Access for 12.05 MW (4.25 MW under long term Open Access and 7.80 MW under short term Open Access) while applications of around 19.70 MW are pending for approval. Such migration of 31.79 MW would result in stranded Capacity with the Company from our already tied-up long term and medium-term agreements.

7.5.9 Regulation 50.1 of the MYT Regulations, 2019 provides that the additional surcharge for obligation to supply as per Section 42(4) of the Act shall become applicable only if it is conclusively demonstrated that the obligation of a Licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract.

7.5.10 Accordingly, to demonstrate the loss of revenue due to open access, the Petitioner has considered a case where considering 31.79 MW power from the long term PPA i.e. with M/s DIL to remain stranded in FY'2023-24. The details of stranded energy are as follows:

TABLE 7-16: STRANDED CAPACITY AND ENERGY AS SUBMITTED BY THE PETITIONER FOR FY 2023-24

Particular	UoM	Value
Stranded Capacity	MW	31.79
No of Days	Nos	365
No. of Hours	Nos	24
Stranded Energy	MU	278.48

7.5.11 The average fixed cost of the power purchased from M/s DIL on the basis of projected during the period from April, 2023 to March 2024 is considered for calculation of stranded energy cost as shown in the Table below:

TABLE 7-17: COST OF STRANDED POWER AS SUBMITTED BY THE PETITIONER FOR FY 2023-24

Sl. No.	Particulars	U.o.M	Ref.	Amount
1	Stranded Energy	MU	a	278.48
2	Weighted Average Fixed Cost for Long Term Power Procurement for FY 2022-23 including Transmission Charges	Rs. /unit	b	3.01
3	Total Cost of Stranded Power due to OA Consumer	Rs. Crore	c=a x b / 10	83.82

7.5.12 Further, Regulation 18 of the UPERC Open Access Regulations provides for Additional Surcharge as under:

Quote

18. Additional Surcharge

18.1. A consumer availing open access and receiving supply of electricity from a person other than the Distribution Licensee of his area of supply shall pay to the Distribution Licensee an additional surcharge, as determined by the Commission, in its Tariff Order, in addition to wheeling charges and cross subsidy surcharge, to *meet the fixed cost of such Distribution Licensee arising out of his obligation to supply as provided under sub-section (4) of section 42 of the Act.*

Unquote

7.5.13 The Petitioner submitted that in order to meet the fixed cost of the Company arising out of his obligation to supply as provided under sub-section (4) of section 42 of the Act, Additional Surcharge is required to be paid by the open access consumer.

7.5.14 The Petitioner submitted that these open access consumers are generally of Industrial and/or Institutional category which contributes towards the base demand and are generally served through firm power i.e. supplied through LT-PPA. The reduction in base demand results into surplus power during certain time blocks of off-peak hours if not the entire day and on off-peak days resulting into additional cost on account of fixed charges of LT-PPA.

7.5.15 The Petitioner submitted that in view of the facts and circumstances explained as above and in accordance with law, the Commission may please approve the Additional Surcharge to cover the Fixed Cost, Compensation, Network Cost and Regulatory Assets.

Commission's Analysis

7.5.16 The Commission observed that the Petitioner has submitted stranded capacity of 31.79 MW and has calculated stranded energy considering 100% load factor. In addition, the Petitioner has also proposed purchase of power from IEX for each month. Further, it is also observed from the load curves that the average load throughout the year is higher than the capacity tied up from Long Term Source viz., DIL (170 MW). Hence, NPCL to justify the calculation of Additional Surcharge for FY 2023-24.

7.5.17 In reply the Petitioner submitted as under:

Quote

It is humbly submitted that for the purpose of power procurement, the demand of the Company is estimated on daily, weekly, monthly and yearly basis and thereafter, *the same is compiled under various brackets of base demand, peak, day and off-peak demand. Also, for the purpose of procurement of power, the demands under various hours of particular month is further normalised for the purpose of preparation of formulation of economical lot size as well as optimum power procurement. Thus, the average load curves may vary as against the demand during a particular time slot.*

Further, with the growth of Greater Noida West and also increased habitation in villages, the gap between peak and off-peak demand has been widening. Thus, the demand of the Company between morning hours and day/peak hours varies significantly throughout the year. The estimated average monthly demand vis-à-vis current LT/MT contracts of the Company for each month from Apr'23 to Mar'24 on hourly-basis is enclosed as Annexure-5.

From the above, the Hon'ble Commission may kindly see that the Company would be having some surplus power particularly between 07-10/11 Hrs throughout the year. While the Company endeavours to reach to normative mark i.e. 85% while scheduling LT/MT power, but, due to increased utilisation of Open Access especially by Industrial/ institutional consumers, the surpluses during off-peak hours is aggravating. Therefore, it is humbly requested that the Hon'ble Commission may kindly allow Addl. Surcharge to the extent of stranded capacity due to such Open Access Consumers.

A month-wise statement of estimated surplus energy during Apr'23 to Mar'24 to remain with the Company due to migration of consumers to Open Access is provided in Table-5 below:

Table-5 : Estimated Stranded Energy at NPCL Periphery (FY 2023-24)		
S. No.	***Month***	***(MUs)***
1	*Apr-23*	*5.43*
2	*May-23*	*8.59*
3	*Jun-23*	*6.18*
4	*Jul-23*	*6.98*
5	*Aug-23*	*8.48*

Table-5 : Estimated Stranded Energy at NPCL Periphery (FY 2023-24)		
6	*Sep-23*	*7.88*
7	*Oct-23*	*6.17*
8	*Nov-23*	*5.23*
9	*Dec-23*	*6.05*
10	*Jan-24*	*3.65*
11	*Feb-24*	*2.67*
12	*Mar-24*	*4.38*
Total		***71.68***

For the above stranded energy, the Company will be constrained to pay the fixed charges corresponding to its existing/proposed LT/MT contracts as per merit order. Therefore, it would require Addl. Surcharge to meet its fixed charges liabilities as follows subject to the approval of Hon'ble Commission as computed in Table-6 below :

Table-6: Computation of Additional Surcharge			
Particulars	***Unit***	***Calculation***	***Value***
Stranded Power at Consumer Periphery	*MUs*	*A=A-Losses%*	*70.84*
Energy received from LT/MT at Regional Periphery @ 85%	*MUs*	*B*	*2636.23*
Corresponding Energy at Consumer Periphery	*MUs*	*C=C-Losses%*	*2425.43*
Billed Fixed Cost including Transmission charges	*Rs. Cr.*	*D*	*689.86*
Weighted Average Fixed Cost at Consumer Periphery	*Rs./Unit*	*E=D*10/C*	*2.84*
Total Cost of Stranded Power due to OA Consumers	*Rs. Cr.*	*F=A*E/10*	*20.15*
Total Open Access Energy at Consumer Periphery	*MUs*	*G=G-Losses%*	*70.84*
Applicable Additional Surcharge on the Open Access Units during the period	***Rs./Unit***	***H=F*10/G***	***2.84***
Note: 1) ASC has been calculated at Consumer's periphery 2) Highest cost power as per MOD considered for estimation of stranded energy			

Unquote

7.5.18 The Commission has taken note of the submission of the Petitioner. It is observed that approximately 60% of the power purchased by the Licensee is from short & medium-term sources. In view of the same, it is not understood, how a consumer opting for open access would then result in the stranded costs for the Petitioner.

7.5.19 Further, it has been observed that the Petitioner has not given any detailed computation of additional surcharge. Therefore, the Petitioner is directed to refer to the Commission's Order dated February 25, 2019 in Petition No. 1323 of 2018 in the matter of *"Recall of the order of this Hon'ble Commission dated 30.11.2017, contained specifically in paragraphs 7.4.8 to 7.4.17 and in paragraph 7.5.3, read with 7.5.4, on the subject of approval of Business Plan/MYT ARR and tariff for State Discoms for FY 2017-18 to FY 2019-20 and true up of FY 2014-15"* related to treatment of additional surcharge and comply to the same. In the above referred Petition, the Petitioners were the State Discoms, however, in the said Petition, the Commission had given its views on the methodology/procedure for determination of additional surcharge Petitions/submissions and would apply to NPCL too.

7.5.20 Hence, in the absence of any detailed computation, the Commission approves the additional surcharge as zero, however, the Petitioner may submit the requisite data and justification separately vide a Petition for determination and approval of Additional Surcharge, which will be dealt accordingly.

8 TARIFF PHILOSOPHY

8.1 CONSIDERATION IN TARIFF DESIGN

8.1.1 Section 62 of the Electricity Act 2003, read with Section 24 of the Uttar Pradesh Electricity Reforms Act, 1999 sets out the overall principles for the Commission to determine the final tariffs for all categories of consumers defined and differentiated according to consumer's load factor, power factor, voltage, total consumption of energy during any specified period or the time at which supply is required or the geographical position of any area, nature of supply and the purpose for which the supply is required. The overall mandate of the statutory legislations to the Commission is to adopt factors that will encourage efficiency, economical use of the resources, good performance, optimum investments and observance of the conditions of the License.

8.1.2 The linkage of tariffs to cost of service and gradual elimination of cross-subsidization is an important feature of the Electricity Act, 2003. Section 61 (g) of the Electricity Act, 2003 states that the tariffs should progressively reflect the cost of supply and it also requires the Commission to reduce cross subsidies within a timeframe specified by it. The need for progressive reduction of cross subsidies has also been underlined in Sections 39, 40 and 42 of the Electricity Act, 2003. The Tariff Policy, 2016 also advocates that the tariff should progressively reflect the efficient and prudent cost of supply.

8.1.3 The Commission has approved the Tariff for FY 2023-24 taking into consideration the Electricity Act, 2003, Tariff Policy and UPERC (MYT for Distribution and Transmission) Regulations, 2019. The Commission in its earlier Tariff Orders during determination of ARR/Tariff has been allowing tariff hikes to the Licensee in view of gaps.

8.1.4 The Commission has also considered the suggestions and objections of the stakeholders, public at large and SAC Members while fixation of the Tariffs. The Commission in its past Tariff Orders had laid emphasis on adoption of factors that encourages economy, efficiency, effective performance, autonomy, regulatory discipline and improved conditions of supply & services. On these lines, the

Commission, in this Tariff Order too, has applied similar principles keeping in view the ground realities.

8.1.5 As regards to the linkage of Tariff with the Cost of Supply, the Regulations 53 of UPERC (MYT for Distribution and Transmission) Regulations, 2019 states as follows:

Quote

53 Determination of Retail Supply Tariff

53.1 The Commission may categorize consumers on the basis of their Load Factor, Power Factor, Voltage, total consumption of electricity during any specified period, or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required.

53.2 The retail supply Tariff for different consumer categories shall be determined on the basis of the Average Cost of Supply. While determining the Tariff, the Commission shall also keep in view the cost of supply at different voltage levels and the need to minimise Tariff shock to consumers.

53.3 It would be endeavoured to rationalize the number of consumer categories and Tariff structure. The Fixed / Demand Charges will be gradually aligned over a period upto the Fixed Cost of the ARR which would comprise of Fixed Charges of Generating Stations, Transmission Charges, Return on Equity, Interest on Loan, Depreciation, O&M & other fixed costs. The Energy Charge will be gradually aligned to the remaining ARR, i.e., the Variable Cost of the ARR, which would comprise the Fuel Cost of the Generating Stations & other variable costs.

Unquote

8.1.6 In terms of the UPERC (MYT for Distribution and Transmission) Regulations, 2019, Tariff Policy, 2016 and the Electricity Act, 2003, the Commission opines that in the ideal scenario, the Tariff of any category should be linked to the cost incurred by the system for the said category. However, as these details are not available for all Distribution Licensees, the Commission while determining the tariff for each category, has looked into the relationship between the tariff and the overall average cost of supply for FY 2023-24. Efforts are made as far as possible, to move the tariff of appropriate consumer categories, towards the band of +/- 20% to meet the declared objectives of the UPERC (MYT for Distribution and Transmission) Regulations, 2019, Tariff Policy, 2016 and the Electricity Act, 2003.

8.1.7 It has been observed that in general, there are many issues in the data of Billing Determinants, hence the Petitioners are directed to check and verify the Billing Determinants properly and report the same responsibly to the Commission in next Tariff Filing.

8.1.8 The Petitioner has not proposed any Tariff Proposal in the Petition. Accordingly, the Commission has approved the tariffs for the various categories / sub-categories of consumers which have been detailed in Rate Schedule as applicable to the NPCL Consumers for FY 2023-24 is annexed at the end of this Tariff Order. **Taking into consideration the surplus, all the Consumers of the NPCL shall continue to be entitled to a regulatory discount of 10% (Ten Percentage) on the 'Rate' i.e. on Fixed / Demand Charge and Energy Charge excluding Electricity Duty etc. and the same will be shown clearly in their bills. Further decision regarding adjustment of regulatory discount shall be taken based on the True-Up done in the subsequent years or any further Orders of the Commission.**

8.2 COMPLIANCE OF 13TH AMENDMENT TO UP ELECTRICITY SUPPLY CODE, 2005

8.2.1 The Commission is in receipts of several complaints from several consumers in multi-storied buildings regarding harassment by the builders/ RWA. They further highlighted their inability to get electricity supply directly from the distribution licensee due to the single point arrangement in their multi-storied buildings. Taking into consideration the need of the consumers, the 13th amendment to the UP Electricity Supply Code 2005 was implemented by the Commission wherein it was directed that all residential multi-storied buildings having single point connection shall be converted to multi point system. As per the amendments and the subsequent directions under the suo-moto proceedings, subsequent to, Conversion of single point to multi point connection in existing building or in buildings under construction, where electrical load was sanctioned on single point

& installation of electrical work has been completed or about to complete, will not be done only if 51% or more residents / occupiers / owners / allotees are willing to retain single point connection. Further, it has also been directed that all new residential multi-storied buildings will not be having single point connection. However, the work is still in progress in the area of Petitioner and is being monitored by the Commission vide a separate Suo-Moto proceeding.

8.2.2 It has been alleged by the consumers in multi-storied buildings that the hindrances are being caused by the builders/ RWA in converting from single point to multi point connection. It has also been submitted by the consumers in the Single Point Category (LMV-1B – supply at single point for bulk loads) that the other charges associated with the maintenance of the societies/ residential buildings are also being levied along with the electricity bills. The Commission in the past had given directions that any charges as per Tariff Order shall only be levied as part of the electricity bills. Expenses towards supply of electricity, distribution loss, electrical maintenance, billing, accounting and audit etc. are to be borne by the builders / RWA. These charges are neither levied by the distribution licensee nor are realized by the licensee. Hence, these should also not form part of the tariff. The tariff is determined only for the ARR of the licensee and not for the builders/ RWA. Thus, the Commission decides to abolish 5% additional charge for the Single Point Category (LMV-1B – supply at single point for bulk loads) for expenses towards supply of electricity, distribution loss, electrical maintenance, billing, accounting and audit etc. in order to address the concerns and further contributes towards the conversion from single point to multi point connections. In similar lines, the Tariff of LMV-1B (single point Multi Storied Buildings) has been kept as Rs. 7.00 / kWh whereas highest slab for other metered consumers (multipoint connection) is Rs. 6.50 / kWh which will further act as deterrent to retain single point connection.

8.3 OTHER TARIFF PROPOSAL

8.3.1 **E-bill:** The Petitioner proposed to introduce the option of E-bill to its consumers as a replacement of paper bill and incentivise them by giving a discount of Rs. 5/- per month in lieu thereof. E-bill will be delivered to the consumer on its registered Mail

ID and phone number (WhatsApp) in electronic form instead of delivering paper bill at his/her registered address. This will help in saving the environment and reducing the carbon footprints.

E-bill will be a small step towards achieving environmental sustainability. Eliminating paper bills will also reduce usage of paper, ink, plastic, power & fuel and countless other aspects of the manufacturing, delivery, and disposal/recycling processes etc. Also, encrypted E-bill protected by password will enhance the security by sending the billing information directly to respective consumers minimizing the risk of its misappropriation.

8.3.2 **Trust Billing:** The Petitioner proposed to provide incentive of Rs. 10/- per month to the consumer opting for Trust Billing. Trust Billing was introduced by Clause 6.6 (ii) in Electricity Supply Code (Seventh Amendment), 2005. Under this, consumer can opt for submission of their meter reading to the licensee through e-mail and SMS. Thus, this can help in reducing the provisional bills as well as enhance consumer trust & convenience.

The Petitioner also proposed to ask its consumers to provide the image of meter reading while submitting the Trust Billing in order to eliminate/minimise misuse of this facility. Also, to facilitate/promote Trust Billing the Commission may allow the consumers of the Petitioner to share their meter reading via various new digital platforms like WhatsApp, NPCL app, NPCL website etc.

8.3.3 **Digital Payment:** In order to promote digital payment, the Commission has currently allowed payment upto Rs. 4,000 to the consumers without any cash collection charges. In substitution to the above, the Petitioner requests the Hon'ble Commission to allow rebate @ 1.0% to all LT consumers opting for payment through Digital Mode for promoting amongst the larger number of consumers.

8.3.4 **Green Energy Tariff:** The Commission vide Tariff Order dated July 20,2022 has approved a Green Energy Tariff @ Rs. 0.54 per kWh for the consumers of the Company. The approved tariff is applicable for all the opting consumers except domestic and agriculture consumers. Further, the tariff is in addition to the regular tariff as approved by the Commission for eligible consumers. The Company has been approaching all the eligible consumers to opt for Green Tariff since the notification of above Tariff Order. However, so far, the response from the consumers is not encouraging mainly due to payment of additional Green Tariff @ Rs. 0.54 per kWh over and above the normal tariff for obtaining green power.

As the renewable power procured will be considered against the Renewable Power Obligation (RPO) of the Petitioner even after the consumers opt for Green Tariff, the Petitioner request the Commission to allow the Petitioner to offer green power to its consumers at the retail tariff plus a nominal cost for instance Rs. 0.05 per unit till RPO level prescribed by the Commission to promote the adoption of Green Energy. The priority may be decided on first-cum-first-serve basis.

8.3.5 The above proposals were also discussed in the State Advisory Committee (SAC) meeting held on May 08,2023 and the same were not accepted by the Committee. The Green Energy Tariff is discussed in the next para.

8.4 GREEN ENERGY TARIFF

The Commission has approved a Green Energy Tariff of Rs. 0.44 per kWh for State Discoms, the same shall also be applicable for NPCL along with other terms & conditions as discussed in the ARR / Tariff for FY 2023-24 of the State Discoms.

8.5 APPLICABILITY OF TARIFF CATEGORY

The applicability, character and point of supply and other terms & conditions of different consumer categories have been defined in the Rate Schedule annexed to this Tariff Order. In case of any inconformity, the Rate Schedule shall prevail over the details given in the various sections of this Tariff Order.

9 REVENUE GAP

9.1 REVENUE FROM SALE OF POWER AT APPROVED TARIFF

Petitioner's submission

9.1.1 The Regulation 5.6 of MYT Regulations, 2019 provides as: -

Quote

*5.6 Based on the approved Business Plan the ARR Petition shall be filed by the Licensee that shall include forecast of ARR and expected revenue from existing Tariff. Further, the Licensee shall also submit the category/ sub-category wise proposed Tariff, **that would meet the gap in the ARR, including unrecovered revenue gaps of previous years** to the extent proposed to be recovered.*

Unquote

9.1.2 The Licensee based on Demand Estimates as forecasted in Business Plan, has forecasted the revenue for FY 2023-24 on the basis of existing approved tariff is shown in below:

Table 9-1: REVENUE FROM EXISTING TARIFF AS SUBMITTED BY THE PETITIONER FOR FY 2023-24 (RS. CRORE)

Sl. No.	Category	Sales	Revenue	Average Billing Rate (ABR)
		(MU)	(Rs. Crore)	(Rs/kWh)
1	LMV-1: Domestic Light, Fan & Power	980.70	595.69	6.07
2	LMV-2: Non-Domestic Light & Fan & Power	59.28	59.70	10.07
3	LMV-3: Public Lamps	37.76	31.89	8.44
4	LMV-4: Institutions	18.89	16.88	8.94
5	LMV-5: Private Tube Wells	20.45	4.40	2.15
6	LMV 6: Small and Medium Power	130.94	112.13	8.56
7	LMV-7: Public Water Works	30.48	28.20	9.25
8	LMV-8: STW and Pumped Canals			
9	LMV-9: Temporary Supply	54.58	49.46	9.06
10	LMV-11: Electric Vehicle Charging	1.01	0.65	6.42
11	HV-1: Non-Industrial Bulk Power	435.50	381.14	8.75
12	HV-2: Large and Heavy Power	1,546.00	1,098.69	7.11
13	**Total**	**3,315.59**	**2,378.83**	**7.17**

9.1.3 Regulation 28.5 of MYT Regulations, 2019 provides for allowance of carrying cost on regulatory assets. Accordingly, the carrying cost on Regulatory Asset created and subsequent recoveries till FY 2021-22 is as shown in the Table below:

Table 9-2: CARRYING COST FOR FY 2021-22 AS SUBMITTED BY THE PETITIONER (RS. CRORE)

Sl. No.	Particulars	Ref.	Approved	Actual
1	**Regulatory Assets at the beginning of Year**	a	(548.99)	(22.33)
2	Addition of Regulatory Assets during the year	b	(540.57)	59.72
3	Closing Regulatory Assets (before Carrying cost for the year)	c=a+b	(1,089.55)	35.49
4	Average Regulatory Asset	d=(a+b)/2	(819.27)	6.58
5	Applicable Interest Rate for Working Capital Finance	e	10.65%	9.50%
6	**Carrying Cost of Regulatory Asset**	**f=d x e**	**(87.25)**	**0.63**

9.1.4 The Petitioner submitted that the above carrying cost has been computed considering the following: -

- Carrying cost has been computed at SBI – 1Yr. MCLR + 2.50% as considered for Working Capital Facility i.e., 9.50%.
- As directed by the Hon'ble APTEL, the surplus amount of Rs. 19.64 Crore for FY 2006-07 approved by the Commission, being not available with the Company, has not been adjusted in determination of cumulative deficit.

Commission's Analysis

9.1.5 The Commission has computed the revenue for FY 2023-24 by considering the Rate Schedule approved in this Tariff Order, Regulatory Discount and the approved Billing Determinants for FY 2023-24. The following Tables summarize the revenue approved by the Commission for FY 2023-24 at approved Tariff Rates with regulatory discount.

TABLE 9-3: REVENUE APPROVED FOR FY 2023-24

Sl. No.	Category	Sales	Revenue	Average Billing Rate (ABR)
		(MU)	(Rs. Crore)	(Rs/kWh)
1	LMV-1: Domestic Light, Fan & Power	980.70	613.74	6.26
2	LMV-2: Non-Domestic Light & Fan & Power	59.28	64.54	10.89
3	LMV-3: Public Lamps	37.76	34.45	9.12
4	LMV-4: Institutions	18.89	17.13	9.07

Sl. No.	Category	Sales	Revenue	Average Billing Rate (ABR)
		(MU)	(Rs. Crore)	(Rs/kWh)
5	LMV-5: Private Tube Wells	20.45	4.34	2.12
6	LMV 6: Small and Medium Power	130.94	103.83	7.93
7	LMV-7: Public Water Works			9.56
8	LMV-8: STW and Pumped Canals	30.48	29.15	
9	LMV-9: Temporary Supply	54.58	49.10	9.00
10	LMV-11: Electric Vehicle Charging	1.01	0.65	6.42
11	HV-1: Non-Industrial Bulk Power	435.50	383.53	8.81
12	HV-2: Large and Heavy Power	1,546.00	1,112.76	7.20
13	**Total**	**3,315.59**	**2,413.23**	**7.28**

9.1.6 The Commission has computed the revenue as per the tariff rates approved in this Order and the approved billing determinants for FY 2023-24. The revenue at tariff determined in this Order has already been approved in the ARR chapter for FY 2023-24. The estimated gap/surplus for FY 2023-24 of NPCL is as shown in the Table below:

Table 9-4:ESTIMATION OF ARR GAP / (SURPLUS) FOR FY 2023-24 (RS. CRORE)

Particulars	Derivation	True-up (FY 2021-22)			APR (FY 2022-23)			ARR (FY 2023-24)	
		Approved in Tariff Order dated 26.08.2021	Petition for FY 2021-22	Approved	Approved in Tariff Order dated 20.07.2022	APR Petition for FY 2022-23	Approved	ARR Petition for FY 2023-24	Approved
ARR	A	1,508.46	1,997.48	1,755.18	1,786.75	2,369.14	2,369.14	2,640.67	2,367.02
Revenue (inclusive of 10% regulatory discount)	B	2,049.03	1,939.66	1,939.66	2,229.86	2,272.06	2,272.06	2,644.95	2,413.23
Opening Gap/(Surplus) (i.e., closing of last year)	C	(548.99)	136.80	(870.73)	(951.03)	210.36	(1,146.70)	333.85	(1,161.62)
Gap/(Surplus) during the year	D=B-A	(540.57)	57.82	(184.48)	(443.11)	97.09	97.09	(4.28)	(46.21)
Closing Gap/(Surplus)	**E=C+D**	**(1,089.55)**	**194.62**	**(1,055.22)**	**(1,171.16)**	**307.44**	**(1,049.61)**	**329.57**	**(1,207.83)**
Carrying cost rate (%) @ IWC	F	10.65%	9.50%	9.50%	9.50%	10.20%	10.20%	10.20%	10.20%
Carrying cost	G=F*(C+D/2)	(87.25)	15.74	(91.48)	(100.80)	26.41	(112.01)	33.83	(120.84)
Cumulative Gap/ (Surplus)	**H=G+E**	**(1,176.81)**	**210.36**	**(1,146.70)**	**(1,271.96)**	**333.85**	**(1,161.62)**	**363.40**	**(1,328.67)**
Provision	**I**								**247.27**
Cumulative Gap/ (Surplus) with provision	**J=H-I**								**(1,081.41)**

9.1.7 The Commission as shown in the above table has computed the overall revenue Gap / (Surplus) for FY 2023-24 which incorporates the impact of True-up for FY

2021-22 and APR for FY 2022-23.

9.1.8 Further, the Commission has computed the Impact of DIL MYT Order dated September 21, 2022 in the Petition No. 1531 of 2019 as under:

TABLE 9-5 IMPACT OF ORDER DATED SEPTEMBER 21, 2022 IN PETITION NO. 1531 OF 2019 PROVISIONALLY CONSIDERED BY THE COMMISSION (Rs. Crore)

Particulars	True Up / APR / ARR	Claimed by NPCL in True-Up / APR / ARR	Considered by Commission for DIL in NPCL True-Up / APR / ARR	Approved in DIL MYT Order	Impact of MYT Petition of DIL
		(A)	(B)	(C)	(D)=(C)-(B)
FY 2019-20	True Up	522.47	401.67	557.27	155.60
FY 2020-21	True Up	602.10	516.32	551.05	34.73
FY 2021-22	True Up	612.31	531.24	545.77	14.53
FY 2022-23	ARR	610.40	511.53	540.54	29.01
FY 2023-24	ARR	536.31	536.26	536.26	0.00
Total		**2,347.28**	**2,497.02**	**2,730.89**	**233.87**

9.1.9 Further, the Petitioner had claimed the Change in Law and additional coal cost of power purchase from DIL in the true-up of FY 2019-20, FY 2020-21 & FY 2021-22 which were not considered by the Commission in the true-ups of respective years for the Petitioner. The same has been provisionally considered in the estimation of revenue Gap/ (Surplus) for FY 2023-24 and shall be subject to true up of DIL.

9.1.10 The Commission for estimating the revenue Gap/(Surplus) for FY 2023-24 has provisionally considered the cost impact of DIL Petitions as prayed by the Petitioner. The impact of DIL Petitions on the above matters will be subjected to appropriate adjustment on issuance of DIL True-Up Order for FY 2019-20 to FY 2023-24, as the case may be. The impact of the DIL Petitions is summarized in the Table below:

TABLE 9-6: IMPACT OF DIL PETITIONS PROVISIONALLY CONSIDERED BY THE COMMISSION FOR GAP / (SURPLUS) of FY 2023-24 (Rs. Crore)

Particulars	Impact computed
Impact of MYT Order of DIL for FY 2019-20, FY 2020-21, FY 2021-22, FY 2022-23 and FY 2023-24	233.87

Particulars	Impact computed
Impact of Additional Coal charges claimed by the Petitioner for FY 2019-20 in the True Up of FY 2019-20	6.38
Impact of Change in Law / Additional Coal charges claimed by the Petitioner for FY 2019-20 and FY 2020-21 in the True Up of FY 2020-21	8.93
Impact of Additional Coal charges claimed by the Petitioner for FY 2021-22 in the True Up of FY 2021-22	-7.03
Impact of Change in Law claimed by the Petitioner for FY 2021-22 in the True Up of FY 2021-22	5.12
Impact of DIL Petitions	**247.27**

9.1.11 Based on the above, the net revenue Gap/(Surplus) for FY 2023-24 is as under:

TABLE 9-7: ESTIMATION OF REVENUE GAP/(SURPLUS) FOR FY 2023-24 (Rs. Crore)

Particulars	Revenue Gap/ (Surplus
Revenue Gap/ (Surplus) approved for FY 2023-24	**(1,328.67)**
Impact of DIL (provisionally considered)	**247.27**
Net Revenue Gap/ (Surplus)	**(1,081.41)**

9.1.12 The Surplus for FY 2023-24 at the approved revenue will be treated appropriately at the time of next Tariff proceedings. Further, the following Tariff Orders have been challenged in the Hon'ble APTEL and various court whose proceedings are ongoing. The final judgements may have a significant impact on the Tariff of the consumers. List of ongoing proceedings is as under:

TABLE 9-8: CASES PENDING BEFORE THE SUPREME COURT, HIGH COURT & APTEL (MATTER RELATED TO TARIFF ORDERS AND REGULATIONS)

Sr. No.	Description of the Case	Forum where the case is filed	Case No.
1	NPCL Appeal against the Tariff Order (FY 2020-21)	Hon'ble Appellate Tribunal for Electricity, New Delhi	Appeal No. 98/2021 (Appeal against Commission's Order dated 04.12.2020 in Petition No. 1541/2019)
2	NPCL Appeal against the Tariff Order (FY 2021-22)	Hon'ble Appellate Tribunal for Electricity, New Delhi	Appeal No. 343/2021 (Appeal against Commission's Order dated 26.08.2021 in Petition No. 1684/2021)
3	NPCL Appeal against the Tariff Order (FY 2022-23)	Hon'ble Appellate Tribunal for Electricity, New Delhi	Appeal No. 398/2022 (Appeal against Commission's Order dated 20.07.2022 in Petition No. 1797/2021)

9.1.13 The Computation of ARR and Revenue for FY 2023-24 in the Order are estimated figures and may vary and so the projected gap / surplus will also undergo change correspondingly. The Commission will analyze these points in future Tariff proceedings.

9.2 AVERAGE COST OF SUPPLY

Commission's Analysis

9.2.1 The Commission in the Table below, summaries the percentage revenue realization of the Petitioner for 2023-24 by considering the Average Billing (ABR) and Average Cost of Supply (ACOS). The ACOS and ABR (after considering the regulatory discount of 10%) of the Petitioner for FY 2023-24 works out as Rs. 7.02 /kWh and Rs. 7.27 /kWh, respectively. This results to revenue surplus position of the Petitioner for FY 2023-24.

9.2.2 As per the MYT Regulations, 2019, the ABR for each category is required for the purpose of Fuel Surcharge. While determining the ABR it was found that the Billing Determinants for the lifeline consumers (Rural & Urban) was not provided by the Petitioner. The Commission vide Deficiency Note Letter dated January 6, 2023 sought such information from the Petitioner. In reply the Petitioner submitted the month-wise Billing Determination and revenue for both Urban and Rural lifeline consumers. The same is tabulated as below:

TABLE 9-9: BILLING DETERMINANTS AND REVENUE OF LIFELINE CONSUMERS UNDER LMV:1 CATEGORY SUBMITTED BY THE PETITIONER

Particulars	Particulars	No. of consumers	Connected load/ contracted demand (in KW)	Total Energy Sales (in MU)	Revenue (In Rs. Crore)	ABR (Rs./kWh)
2021-22	Rural	1743	1743	0.7	0.30	4.22
	Urban	669	669	0.3	0.13	4.13
2022-23	Rural	1464	1464	0.9	0.33	3.53
	Urban	654	654	0.4	0.14	3.43
2023-24	Rural	1228	1228	1.4	0.41	2.99
	Urban	608	608	0.9	0.27	3.02

9.2.3 The Commission noted the above information and found the same satisfactory. Also, Commission observed that the Petitioner in the MYT Formats has not provided the Category wise and slab wise billing determinates and corresponding fixed and energy charges. The Commission direct the Petitioner the same should be complied, with any fail in the future ARR & Tariff filings. The Commission will take appropriate measures at the time of True-Up, in case of noncompliance by the Petitioner on the same.

TABLE 9-10: SUMMARY OF AVERAGE BILLING RATE FOR FY 2023-24

Consumer Sub-Category	Average Billing Rate
	Rs. / kWh
LMV-1: Domestic Light, Fan & Power	6.26
LMV-2: Non-Domestic Light, Fan & Power	10.89
LMV-3: Public Lamps	9.12
LMV-4: Light, Fan & Power for Institutions	9.07
LMV-5: Private Tube Wells/ Pumping Sets	2.12
LMV 6: Small and Medium Power up to 100 HP (75 kW)	7.93
LMV-7 & 8: Public Water Works & LMV, State Tube Wells & Pump Canals up to 100 HP	9.56
LMV-9: Temporary Supply	9.00
LMV-11: Electrical Vehicles	6.42
HV-1: Non-Industrial Bulk Loads	8.81
HV-2: Large and Heavy Power above 100 BHP (75 kW)	7.20
Grand Total	**7.28**
ACOS	**7.14**

9.2.4 Cross subsidisation for most of the categories has reduced as compared to last year.

9.2.5 The Petitioner should ensure that it must at least achieve & maintain the category wise ABRs approved, failing which the Commission may take an appropriate view and necessary action.

9.2.6 Analysis of few parameters is depicted below:

Table 9-11: SUMMARY OF FY 2023-24 (Rs. Crore)

Particulars	Units	Value
Total sales	MU	3,315.59
Revenue from Tariff	Rs. Crore	2413.23
Total power purchase	MU	3,844.08
Total power purchase cost	Rs. Crore	2,096.47
ARR	Rs. Crore	2,367.02
APPC without Transmission (at NPCL Periphery)	Rs./kWh	5.06
APPC including Transmission (Inter + Intra) (at NPCL Periphery)	Rs./kWh	5.84
ABR	Rs./kWh	7.28
ACoS	Rs./kWh	7.14

10 DIRECTIVES

10.1 COMPLIANCE WITH THE DIRECTIVES ISSUED IN THE ORDER DATED AUGUST 26, 2021

10.1.1 The Commission has issued certain directives to the Petitioner in the Order dated August 26, 2021. The status of compliance submitted by the Petitioner with the same is as shown in the Table below:

Table 10-1: Status of compliance / Petitioner's reply to directive issued in the Order dated August 26, 2021

Sl. No.	Directive	Status of compliance / Petitioner's reply
1.	The licensee is directed not to contract any Long term and medium term PPA beyond the license period. However, no approval will be required for purchasing power through exchange. For all other power purchases, prior approval of the Commission is necessary. The Licensee is also directed to strictly follow the Central Government Guidelines for Procurement of power for short term (i.e. for a period more than one day to one year) through tariff-based bidding process using National e-bidding portal. The Petitioner to ensure that it fulfils all the Renewable Purchase Obligation (solar, non-solar, HPO) and the procure power from GTAM markets or as per Central Government Guidelines and to get prior approval of the Commission wherever requires.	The Commission vide its order dated November 22,2022 has allowed the Company to procure power for the period upto license tenure i.e. June 09, 2029. With respect to the directive for power procurement through Competitive bidding noted for compliance.
2	The Commission has taken note of the objections/suggestions made by the stakeholder in this regard and also noted response by the Petitioner. Further the Commission directs the Petitioner to incorporate the date of capitalisation and decommissioning in the FAR from next year.	As directed, the date of capitalization has been incorporated in the FAR enclosed. Further, the details of the assets retired alongwith the date of decommissioning is provided separately.

<table>
<tr><th>Sl. No.</th><th>Directive</th><th>Status of compliance / Petitioner's reply</th></tr>
<tr><td>3</td><td>Accordingly, the same is approved. However, the Petitioner is directed to limit its UI and indulge in real time markets.</td><td>In compliance to the directives of the Hon'ble Commission, it is humbly submitted that during FY 2021-22, the Company has procured significant power from power exchange and in comparison, limited its drawl from UI as give in the Table herein below-
<table>
<tr><th>Particulars</th><th>MU (% volume)</th><th>Rs. Cr. (% Total Cost)</th></tr>
<tr><td>Day Ahead Market / RTM</td><td>559.30 (22.02%)</td><td>347.65 (22.80%)</td></tr>
<tr><td>GTAM</td><td>73.93 (2.91%)</td><td>40.33 (2.64%)</td></tr>
<tr><td>Total Exchange</td><td>633.23 (24.93%)</td><td>387.97 (25.44%)</td></tr>
<tr><td>UI</td><td>41.21 (1.62%)</td><td>28.11 (1.84%)</td></tr>
<tr><td>Total</td><td>2,540.05</td><td>1,525.06</td></tr>
</table>
The Company humbly brings to the kind attention of the Hon'ble Commission that it is procuring 24.93% of MU from Power Exchange whereas UI is limited to only 1.62% as against 10% allowed as per Regulation 14.7 of MYT Regulations 2019.</td></tr>
<tr><td>4</td><td>Further, the Petitioner is directed to update the Commission in regard to 132 kV and above assets (if any) which have not been covered as yet, in the next tariff filing.</td><td>All details of assets of 132kV and above have already been provided at the time of True Up of FY 2019-20 It is further clarified that no CAPEX has been incurred at 132 kV and above during FY 2021-22.</td></tr>
<tr><td>5</td><td>Hence, the Petitioner is directed to maintain a separate individual asset wise FAR for assets capitalized after 1.4.2020 and the Gross Block and Depreciation may be computed separately from the Gross Block before 1.4.2020. Accordingly, from FY 2020-21 onwards the Petitioner to maintain two separate Gross Blocks (one for assets upto</td><td>As per the directives of the Commission, Written Down Value (WDV) of the Fixed Assets capitalized till FY 2019-20 is treated as Gross Block and Depreciation is being computed on the said WDV using Straight Line Method (SLM). Further, depreciation on Fixed Assets capitalized from FY</td></tr>
</table>

Sl. No.	Directive	Status of compliance / Petitioner's reply
	31.3.2020 and second for assets after 1.4.2020) and two separate FAR`s depicting addition of Assets details from 01.04.2020 onwards for the purpose of depreciation computation for the purpose of Regulatory Accounts.	2020-21 onwards has- been computed on SLM basis. The detailed submission has been made by the **Text of True-up FY 2021-22.**

10.2 COMPLIANCE WITH THE DIRECTIVES ISSUED IN THE ORDER DATED JULY 20, 2022

10.2.1 The Commission has issued certain directives to the Petitioner in the Order dated July 20, 2022. The status of compliance submitted by the Petitioner with the same is as shown in the Table below:

Table 10-2: Status of compliance / Petitioner's reply to directive issued in the Order dated July 20, 2022

SL.No.	Directive	Status of compliance / Petitioner's reply
1	Provide the details of all the pending cases filed by NPCL against UPERC in various forums along with the status of the same.	The details of all cases filed by the Company against the orders of the Commission pending in various forums along with the status of the same is provided.
2	Provide details of vehicles and any asset of 132 kV & above (and associated assets) capitalized or part of CWIP during the year along with the True-up/ARR Petition as provided during the previous year proceeding. Further, the Petitioner is directed not to buy luxury vehicles and also restrict itself in respect to the number of vehicles.	As stated above, the Company has not incurred any capital expenditure at or above 132 kV voltage level during FY 2021-22. Further, the requisite details of vehicles purchased during FY 2021-22 have been provided. Further, as regards purchase of vehicles, aggrieved by the Order of the Hon'ble Commission, the Company has filed an appeal before the Hon'ble APTEL which is sub judice.
3	Provide the details of the land capitalized during the year, along with the purpose of usage and status of usage of land, along with the lease deed for each land	It is humbly submitted that the Company has capitalized 1 no. land costing Rs. 3.70 Cr. at ESS 33/11 KV, Sector-01, Greater Noida

SL.No.	Directive	Status of compliance / Petitioner's reply
	capitalized. Also provide the list of un-utilized land capitalized.	during FY 2021-22. The updated list of land capitalized is provided.
4	Provide copy of all the registries and usage details of all the land capitalized during the year.	It is humbly submitted that the Company has capitalized 1 no. land costing Rs. 3.70 Cr. at ESS 33/11 KV, Sector-01, Greater Noida during FY 2021-22. Copy of the registry of the same is enclosed.
5	Provide list of Open Access consumers (Long Term, Short Term, Medium Term) along with their consumption.	The requisite details have been provided.
6	Wherever the opening values in the new audited accounts doesn't not match with the closing shown in the previous audited accounts, the reasons for the same to be provided as part of balance sheet.	It is humbly submitted that the closing balances of Fixed Asset Register as at 31st March 2021 are tallied with the opening balances of FAR as at 1st April 2021.
7	Provide detailed breakup of CWIP claimed for the year along with the Petition.	The details of CWIP is provided.
8	Provide the portion of electricity duty in the Bad Debts along with the Petition and reconcile the same with the balance sheet for the year.	The portion of electricity duty in Bad Debts is provided.
9	Submit the month-wise actual category/sub-category/slab-wise Billing Determinants (No. of Consumers, Connected Load & Sales) & actual Revenue for the year along with the Petition.	The month-wise actual category/sub-category wise Billing Determinants (No. of Consumers, Connected Load & Sales) & actual Revenue for the year has been provided.
10	Submit the reconciliation of the actual O&M expenses (i.e., employee expenses, A&G expenses, R&M expenses) vis-à-vis the normative expenses for the year.	The reconciliation of the actual O&M expenses (i.e. employee expenses, A&G expenses, R&M expenses) vis-à-vis the normative expenses for the year has been provided.
11	The Petitioner is directed to ensure that the actual Power Purchased (MU) ex - bus & at energy delivered	Complied. Included in Audited Accounting Statement enclosed.

SL.No.	Directive	Status of compliance / Petitioner's reply
	at NPCL periphery (MU) along with inter & intra state losses are made part of the Audited Balance Sheet.	
12	Ensure that the actual category/sub-category wise Billing Determinants (No. of Consumers, Connected Load & Sales) & actual Revenue are made part of the Audited Balance Sheet.	Complied. Included in Audited Accounting Statement enclosed.
13	The Petitioner is directed to ensure that the actual Power Purchase Cost with detailed break-up of each source, inter-state transmission charges, intra-state transmission charges are made part of the Audited Balance Sheet.	Complied. Included in Audited Accounting Statement.
14	Submit the PPAs, Commission's approval and bills of each source from which power is procured, along with the True-up/ARR petition.	Copies of PPAs, approval of Hon'ble Commission and bills of each source of power procured for the year have been provided.
15	Submit the details of each investment scheme / project exceeding Rs. 10 Crore and obtain prior approval of the Commission as per Regulations for inclusion as regulatory expenditure in the ARR. Further, Petitioner should submit the Petitions on quarterly basis for approval of the Commission in line with the MYT Regulations 2019. Failure to do so will result in disallowance of such investment in the ARR in order to safeguard the consumers from unjust and unfair charges.	1. For FY 2021-22 there are no project above 10Cr 2. For FY 2022-23 there are no project above 10Cr 3. For FY 2023-24, Company has submitted detailed plan in the instant petition on capex on projects valuing more than Rs. 10 Cr viz. 1) Capex project to evacuate the power from the connectivity granted from new/upcoming Grid Substations 2) Capex Project to Build Cyber Resilience. The detailed explanation has been provided in Text of ARR FY 2023-24 of this petition. In compliance with the provisions of Regulation 44.2 of the MYT Regulations 2019, the Company will approach the

SL.No.	Directive	Status of compliance / Petitioner's reply
		Commission for a specific prior approval of the projects.
16	Provide the daily load curves and monthly load curves for last year along with the corresponding N2 region demand curves of exchange.	The typical load curves of a particular day in winter and summer and monthly load curves for FY 2021-22 along with the corresponding IEX N2 load curves in soft copy enclosed.
Directions provided in Tariff Order dated 20th July, 2022 (Page 522-525 Para 10.3 Tariff Order dt 20.07.2022)		
10.3.1	The Commission directs the Petitioner to ensure to file its ARR/ tariff Petition on time strictly in accordance with the applicable UPERC MYT Regulations.	Being complied with.
10.3.2	The Petitioners shall upload on its website the Petition filed before the Commission along with all regulatory filings, information, particulars and related documents, which shall be signed digitally and in searchable pdf formats along with all Excel files and as per any other provision of the Regulations and Orders of the Commission. The Petitioner shall also ensure that these files are broken into such size which can be easily downloaded and will not keep them in compressed form as the stakeholders find it difficult to extract the files.	Regulation 5.8 of UPERC MYT regulations 2019, states as follows 5.8 The Petitioner shall within three working days of issue of the Admittance Order, publish a Public Notice in at least two English and two Hindi daily newspapers having wide circulation in its license area, outlining the ARR, proposed Tariff, True-Up and such other matters as may be directed by the Commission, and inviting suggestions and objections from the stakeholders and public at large: Provided that the Petitioner shall also upload on its website the Petition filed before the Commission along with all regulatory filings, information, particulars and documents in the manner stipulated by the Commission. The Petitioner should ensure that there is no requirement of providing personal information for downloading the same:

SL.No.	Directive	Status of compliance / Petitioner's reply
		Accordingly, the Company has been publishing Public Notice in the Newspapers and also uploading the same on its website along with all regulatory filings, information, particulars and documents in the manner stipulated by the Hon'ble Commission. Further, the above documents are also being uploaded on the website of the Commission. With regard to the breaking of files, it is kindly submitted that if the Company upload the same as individual files the size of the total submission will be very high in size and will make lot of difficulties to download the same. However, considering the direction of the Commission, the company will upload the documents/details/filing in ZIP format which is easily accessible on any Smart Device (Computers/Smartphones/Tablets) and will not need any additional software to be installed on the device. Earlier the Company was using the RAR format for uploading the files.
10.3.3	The Commission directs that pre-paid meter / smart meter be installed for all new connections or replacement of faulty meters.	The smart prepaid or prepaid meters are being installed by the Company for individual connections in all residential complexes which are mainly a) Conversion of single point connection into multi-point individual connections, b) New connections in societies and Individual Connection c) Replacement of smart prepaid meter with smart prepaid meter only and prepaid meter with prepaid meter only.

SL.No.	Directive	Status of compliance / Petitioner's reply
		It is pertinent to mention here that the smart or prepaid meters available along with the technical solution are not capable to handle one of the very basic features of disconnecting or reconnecting the supply remotely through meter itself. Resultantly, all consumers with load >= 25 kW are provided with AMR enabled metering system. The current metering arrangement is very effective and working with more than 98% efficiency. The 2% gap is predominantly because of GPRS / GSM related communication issues. Similarly, all consumers having contractual load of 5 kW and above are provided with Blue Tooth Enabled (BLE) or Low Power Radio (LPR) enabled meters. The reading efficiency for these meters is more than 96% on monthly average basis and it ensures error free and timely meter reading and billing without any manual intervention. We would humbly submit to the Hon'ble Commission that the smart prepaid solution deployed is suitable for clustered consumer base only where all the meters are running on the common infrastructure as per the technical architecture and solution. Deployment of Smart Meters on a piecemeal basis would not yield the desired results. Furthermore, the initial cost of infrastructure involved would be substantially high and therefore would not

SL.No.	Directive	Status of compliance / Petitioner's reply
		be economical. At the same time, due to sparse installation of SMART meters / prepaid meters, the company would not be able to take full benefit of smart metering features. Apart from the above, under this scenario, the Company will have to deploy separate work force to cater to the smart meters and other conventional meters in the same area. In addition to the above, the Ministry of Power has issued a notification on August 17, 2021 and mandated that:- "1. All consumers (other than agricultural consumers) in areas with communication network, shall be supplied electricity with Smart Meters working in prepayment mode, conforming to relevant IS, within the timelines specified below: (i) All Union Territories, electrical divisions having more than 50% consumers in urban areas with AT&C losses more than 15% in financial year 2019-20, other electrical divisions with AT&C losses more than 25% in financial year 2019-20, all Government offices at Block level and above, and all industrial and commercial consumers, shall be metered with smart meters with prepayment mode by December, 2023: Provided that the State Regulatory Commission may, by notification, extend the said period of implementation, giving reasons to do so, only twice but not more

SL.No.	Directive	Status of compliance / Petitioner's reply
		than six months at a time, for a class or classes of consumers or for such areas as may be specified in that notification; (ii) All other areas shall be metered with smart meters with prepayment mode by March, 2025: Provided that in areas which do not have communication network, installation of prepayment meters, conforming to relevant IS, may be allowed by the respective State Electricity Regulatory Commission: …..” From the above, the Hon’ble Commission may kindly observe from clause (ii) above (the company falls under this clause) that all areas other than covered under clause (i) above are mandated to meter all connections with Smart Prepaid Meters by March 2025 considering the constraints of availability of infrastructure, skills, materials, manpower etc. **The Company request to allow installation Smart Meters in cluster metering like High rise societies, commercial complexes, malls etc. and continue to deploy AMR / LPR / BLE meters in other areas which functions on tested and trusted technology. As and when smart meter rollout plan is prepared for any particular area in Greater Noida, the Company would submit its plan for the same and seek prior approval of the Commission.”**

SL.No.	Directive	Status of compliance / Petitioner's reply
10.3.4	100% metering is necessary condition for an efficient distribution network and financial viability of the distribution companies. The metering for all consumers should be completed by end of FY 2022-23.	At present all the consumers are metered. Some consumers of village which are unmetered and the company is making its best efforts for conversion of unmetered to metered connection by end of FY 22-23. It is humbly submitted that the Company already has 97.9% metered consumers as at March, 2022. Though unmetered consumers constitutes 2.1% in terms of numbers but in terms MUs and Revenue, the same is at 0.59% and 0.18% respectively. While the Company is fully geared up to install meters for all the remaining consumers, which are in the rural areas, however, due to stiff resistance and undue pressure, meters could not be installed. In many cases the meters installed were forcibly removed / damaged. The Company would like to bring to the attention of the Hon'ble Commission, the Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021 which specifies the targets for metering of consumer as under: Consumer Metering: FY 2022-23:- 98% FY 2023-24:- 99% Functional Metering: FY 2022-23:- 93% FY 2023-24:- 96% FY 2024-25:- 98% Thus, BEE has also envisaged that there will be some number of unmetered consumers in the system.

SL.No.	Directive	Status of compliance / Petitioner's reply
10.3.5	The Petitioner is directed to ensure 100% feeder metering and DT metering with energy audit within next one year.	The Company humbly submits that all feeders have been metered. As regards DT metering, necessary action has been initiated and targeting to complete the same for DTs having rating capacity of equal or more than 100KVA by the end Dec 2023.
10.3.6	The Petitioner is directed not to book excess sales under the unmetered categories.	The Commission is requested to kindly refer to the detailed submission given in **Text of True up FY 2021-22** with regard to the booking of sales under unmetered category. From the submission the Hon'ble Commission may please appreciate that the sales have been booked based on normative consumption and sales has also been booked against theft cases. Further, aggrieved by the Order of the Hon'ble Commission the Company has filed an appeal before the Hon'ble APTEL which is sub judice. The Hon'ble Commission is requested to kindly not to disallow the actual sales being booked on realization basis only.
10.3.7	All procurements made by the Petitioner should be through Competitive Bidding only.	Since Complied
10.3.8	The Commission directs the Petitioner, that the Open Access shall be allowed to those who wish to avail Open Access as per the provisions outlined by the Commission in its Regulations, Orders and any amendments from time to time.	Since Complied
10.3.9	The Petitioner is directed to procure all power through tariff-based competitive bidding process or power exchange or DEEP Portal and obtain approval of the	Noted for Compliance. Further, the Commission vide its letter dated 17.11.2022 clarified that the Company can

SL.No.	Directive	Status of compliance / Petitioner's reply
	Commission. The Petitioner may procure short term power within approved ARR limits through power exchange without prior approval of the Commission.	procure power from Power Exchanges without its prior approval subject to conditions specified in the said letter.
10.3.10	The Commission directs the Petitioner to explore and start a pilot project in its area of supply for implementation of peer to peer (P2P) trading of electricity in rooftop solar energy using Blockchain Technology.	Noted for Compliance. The Company is in the process to file a separate petition for approval of Hon'ble Commission prior to project implementation.
10.3.11	The Commission also directs the Petitioner to explore and implement projects including battery storage, and to seek innovative solutions based on energy storage systems and other innovative technologies to reduce the system losses, provide better services to the consumers etc.	Noted for Compliance The Commission is kindly requested to consider the submission of the Company for approving the additional O&M expenditure as prayed in the instant petition under the head of O&M expenditure
10.3.12	The Petitioner is directed to submit DSM account details separately from the power purchase along with ARR/ Tariff fillings.	Refer to Company's reply on point no. 4 in Appendix-IX Additional MYT Formats-II
10.3.13	The Petitioner is directed to define a roadmap for cross-subsidy reduction and take steps to reduce such subsidy to +/- 20% of the Average Cost of Supply (ACos) in compliance with the provisions of the Tariff Policy, 2016.	The details of the Cross-subsidy have been provided**.** The determination of Tariff including CSS is the jurisdiction of the Commission. The Commission may please guide the Company for achievement of the stated objective of the Tariff Policy 2016.
10.3.14	The Petitioner is directed to provide the details of approval of power purchase sources in the annexed format.	The details of approval of power purchase sources provided as per the desired format.
10.3.15	The proceedings under Petition No. 780 of 2012 are going on in the matter of Security Deposit and the final Orders of the Commission will have a bearing on the Security Deposit treatments for the years that have been Trued Up and due to the above proceedings all approvals will be treated as provisional. The Petitioner	The Company hereby humbly brings to the kind attention of the Hon'ble Commission that the Company has been following the treatment of Security Deposit as per Electricity Supply Code 2005 and directions provided by the Hon'ble Commission in its

SL.No.	Directive	Status of compliance / Petitioner's reply
	is directed to make a detailed filing due to the impact of the final order in the above proceedings in the ARR / Tariff filings to be made after issuance of the final order.	various Tariff Orders, therefore, the Final Order is not expected to have any impact, nevertheless in case it has an impact, it would be taken into account.
10.3.16	The Petitioner is directed to enhance the quality of distribution network by employing state-of-the-art technology and contemporary technological solutions which is essential to address the upcoming and new challenges in the sector. Further, the Licensee is directed to focus on institutional capacity building, especially for operations related smart metering, prepaid charging infrastructure, demand response, time of use (TOU), cyber security and privacy of data, usage of AI tools etc. As part of this, inhouse Training Centers/ Programs need to be developed to widen the knowledge-base and upgradation competencies of their employees in line with the trend in technology implementation in the sector which will assist them in bridging the capacity gaps and reduce the reliance on outsourcing of such essential and sensitive services.	Noted for Compliance. The Commission is kindly requested to consider the submission of the Company for approving the additional O&M expenditure as prayed in the instant petition under the head of O&M expenditure.
10.3.17	The Petitioner is directed to provide complete details of energy managed through net metering on monthly basis including energy banked / adjusted and the amount / energy settled at the end of financial year and the treatment done for the same in the financial statements and regulatory submissions every year along with ARR/ Tariff filling.	The details of net metering as required is provided.
10.3.18	The Commission also directs the Petitioner to submit the voltage wise (440V, 11kV, 33kV, 66kV, 132 kV) - Energy Sales and Losses. Also, it is mandatory energy audit report and the cost audit report (prepared in	The Company has been submitting Cost Audit Report alongwith True-up Petition every year regularly alongwith bifurcation of

SL.No.	Directive	Status of compliance / Petitioner's reply
	accordance with Companies (Cost Records and Audit) Rules, 2014) shall also be submitted every year along with the ARR Petition.	Voltage-wise sales and T & D losses, as applicable. The voltage-wise sales and T & D losses for FY 2021-22 has been provided in Form P1 of Appendix-II MYT Tariff Formats. The Energy Audit report for FY 2021-22 as provided by Accredited Energy Auditor as per Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021 has also been provided. It is submitted that the voltage wise losses provided in Form-P1 of Appendix-II MYT Tariff Formats are computed on the basis of Energy Available for Sale, hence may not tally with Form P1 in Appendix-II MYT Tariff Formats.
10.3.19	The Petitioner is directed to do proper accounting with regard to MUs and rates of captive/ internal consumption of electricity and captured the same in the audited balance sheet under separate head. The Petitioner is also directed to submit the complete details viz MUs consumed, tariff and revenue booked along with every ARR / Tariff filling.	With regard to the treatment of own consumption by the Commission, the Company aggrieved by this has filed an appeal before the Hon'ble APTEL, which is sub judice. Further, the Commission is kindly requested to refer to our detailed submission in the Appendix-III Text of True-up FY 2021-22 of this petition, the same is reproduced below for the ready reference of the Commission. The Commission vide its Tariff Order dated 20th July, 2022 has included the deemed revenue against the Captive Consumption of the Company at the rate of LMV-4 (B) and Sales (MU) at the time of True up for FY

SL.No.	Directive	Status of compliance / Petitioner's reply
		2020-21. Aggrieved by the aforesaid treatment, the Company has filed an appeal no 398 of 2022 before the Hon'ble APTEL, which is pending for adjudication As the aforesaid matter is still pending before the Hon'ble APTEL, the Company has considered the captive consumption for FY 2022-23 under Category 4(B) as per the directions of the Commission, however, the revenue has been considered at NIL value as per past practices. The Commission may please appreciate that if the Captive Consumption in MUs is not included in the Sales, the same will result in incorrect computation of the T&D Losses. **Therefore, it is very much necessary to include the Captive Consumption in MUs in the Sales**. It is pertinent to mention here that earlier the Company was considering unit consumed captively under LMV-4 (A) category The details of the Captive Consumption and corresponding amount as per the tariffs of 4 (B) category are given in table below: **Table: Captive Consumption Revenue (Rs. Cr.) and Sales (MU)** **Particulars** / **FY22** / **Remark** Sales (MU) / 2.79 / Included in Sales Revenue (Rs. Cr.) / 5.42 / Not included in Revenue It is submitted that all the connections for captive purposes are metered and are duly

SL.No.	Directive	Status of compliance / Petitioner's reply
		reconciled every month. The recorded energy in the meters has been considered in the Sales since inception and has also been allowed by the Hon'ble Commission accordingly Further, the Hon'ble Tribunal has dealt with the issue of self/ captive consumption by a Distribution Licensee in the matter of **Arun Kumar Datta Vs. DERC & Anr. in Appeal No.195 of 2013 [Judgement dated 09th February, 2015]** wherein it was observed as: "13.4 We feel that the Appellant should have installed meters for self-consumption in all its offices, call centres, substations, etc. The Respondent no.2 does not need specific instructions for the same. When the Respondent no.2 is including self-consumption in its energy sale figures, then it was legally bound to supply electricity for own consumption only through correct meters. <u>**We feel that the State Commission should have allowed self-consumption only to the extent of actual consumption for metered installations**</u>. The formula proposed by the Respondent no. 2 for calculating own consumption in its installations is for calculating energy consumption for consumers in case

SL.No.	Directive	Status of compliance / Petitioner's reply
		of faulty/tempered meters. **Accordingly, we direct the State Commission to redetermine the self-consumption based on the metered data only.** We also do not feel that this would result in change in procedure in true up with respect to the MYT order dated 23.02.2008. In the MYT order the consumption is based on the projections. In the MYT order the State Commission has not approved that the self-consumption would not be metered and would only be assessed by a formula considering the load, number of days/hours, load factor, etc. 13.5 As regards contention of the Appellant for determination of AT&C loss, **we feel that if the self-consumption is deducted from energy sales figures, then corresponding reduction has to be effected in the energy input into the distribution system also**. In view of our directions in para 13.4, we do not want to give any direction with regard to procedure for determination of AT&C loss in the true-up of FY 2010-11." [Emphasis Supplied] Therefore, from the above Judgement of the Hon'ble Tribunal it is also clear that the self/

SL.No.	Directive	Status of compliance / Petitioner's reply
		captive consumption by Distribution Licensee in running its offices, call centers, substations, Distribution Business etc. are require to be allowed by the Commission to the extent of actual consumption for metered installations. Thus, in view of the above, the Company submits to continue the treatment of captive consumption at NIL value as has been considered by the Hon'ble Commission in the previous Orders. Alternatively, without prejudice to the above, it is kindly submitted if the Hon'ble Commission decides to include the Captive Consumption both Revenue (Rs.) and Sales (MU), then corresponding actual expenses in the A&G should also be allowed as the base A&G expenses does not include expenses on account of Captive Consumption due to the reason that the Hon'ble Commission has first time decided to include the same in Revenue of FY 2020-21.
10.3.20	There are several upcoming opportunities for the Petitioner to enhance their non- tariff income particularly from the broadband and 5G telecom companies for installation of their equipment's on the electric poles and infrastructure of the Petitioner. The Petitioner is directed to develop a business plan in this regard and submit the same for the approval of the Commission. The Commission may allow some part of this income as incentive to the Petitioner through	Noted for compliance

SL.No.	Directive	Status of compliance / Petitioner's reply
	revenue sharing based on implementation of the same.	
10.3.21	The Commission directs that all the directions of earlier Tariff Orders which have not been complied yet may be complied with immediately.	Being complied with
10.3.22	Apart from the above directions the Petitioner to comply to the directions provided at various places in this Tariff Order.	Being complied with
Directions provided in Tariff Order dated 20th July, 2022 in different Chapters		
Para 12 (Page 64)	The Commission has taken cognizance of the findings / observations of the Independent Auditor and the same have been considered while doing the True- Up of FY 2020-21. Accordingly, the Petitioner is directed to strictly procure all materials and services through a transparent bidding process, with an aim to optimize the cost, failing which appropriate action may be taken by the Commission.	Being complied with
Para 4.3.15 (Page 77)	The Commission had directed the Petitioner in Tariff Order for FY 2021-22 dated August 26, 2021 to submit the month-wise actual category/sub-category wise Billing Determinants (No. of Consumers, Connected Load & Sales) & Revenue (actual / projected) for the year along with the Petition. However, there has been non-compliance of this directive of the Commission. The Commission again directs the Petitioner to make proper submission of the Billing Determinants in future proceedings failing which appropriate treatment shall be done.	The details of month-wise actual category/sub-category wise Billing Determinants (No. of Consumers, Connected Load & Sales) & Revenue (actual / projected) for the year has been provided.
Para 4.4.15 (Page 81)	The Commission directs the Petitioner to strictly comply with the terms and conditions of tariff and accordingly bill its own consumption. The Commission directs the Petitioner to submit the details of own	Refer to the Company's reply on Directive no. 10.3.19 above

SL.No.	Directive	Status of compliance / Petitioner's reply
	consumption and treatment of the same in the True-Up of subsequent years.	
4.5.95 (Page 123)	The Commission once again reiterates that in future the Petitioner should strictly follow the Central Government Guidelines namely 'Guidelines for short term (i.e. for a period more than one day to one year) Procurement of power by Distribution Licensees through Tariff based bidding process' dated March 30, 2016. The link for the same is provided below: https://www.mstcecommerce.com/auctionhome/RenderFileGeneralAuctions.jsp?file=P PA-Revised-Guidelines-Short-Term.pdf Further, the Petitioner must take prior approvals of the Commission	Being complied with.
6.2.17	The Commission had directed the Petitioner in Tariff Order for FY 2021-22 dated August 26, 2021 to submit the month-wise actual category/sub-category wise Billing Determinants (No. of Consumers, Connected Load & Sales) & Revenue (actual / projected) for the year along with the Petition. However, there has been non-compliance of this directive of the Commission. The Commission again directs the Petitioner to make proper submission of the Billing Determinants in future proceedings, exactly as per the category / sub category / slab provided in the Rate Schedule, failing which appropriate treatment shall be done.	Refer to the Company's reply to Directive no. 9 above (Compliance of directives).
7.1.2 (Page 480)	The Electricity Act, 2003 has defined Open Access as non-discriminatory provision for use of transmission lines or distribution system or associated facilities thereof. Considering the operation constraints and other relevant factors, the Commission directs that the Open Access shall be allowed to those who wish to	Being complied with

SL.No.	Directive	Status of compliance / Petitioner's reply
	avail Open Access as per the provisions outlined by the Commission in its Regulations, Orders and any amendments from time to time.	
7.4.10 (Page 490)	The Commission has observed that in a few voltage level losses have increased which is not logical and acceptable as the overall approved losses has been gone down. The Commission directs the Petitioners to provide genuine loss level and cost of service at each voltage level for each consumer category supported with detailed computation.	Details of Voltage wise losses are covered in the Form-P1 of Appendix-II MYT Tariff Formats. Further, the detail calculation of losses at various voltage level are in conformity with the losses reported in the Cost Audit Report provided in Annexure-2(b) and Energy Audit Report provided.
9.1.12 (Page 511)	From the submissions of the Petitioner, it has been observed that the Petitioner has claimed carrying cost on additional power purchase on account of true-up Order of the Commission dated November 22, 2021. The Commission for the purpose of this Order has considered the absolute amounts allowed for DIL as per the Commission's Order dated November 22, 2021. The issue of carrying cost shall be dealt with in the True-up of FY 2021-22 and FY 2022-23. NPCL is directed to make detailed submissions in this regard in its True-up Petitions for FY 2021-22 and FY 2022-23.	The requisite submissions have been provided in Text of True-up FY 2021-22.
9.2.1 (Page 514)	The ACOS is worked out to be Rs. 6.43 /kWh whereas the ABR even after regulatory discount of 10% comes out to be Rs. 7.22 /kWh showing surplus position. As per the regulations ABR for each category is determined which is used for the purpose of Fuel Surcharge. While determining the ABR it was found that there is certain aberration in the ABR for lifeline consumers as it comes out to be Rs. 6.13 considering the Billing Determinants submitted by the Petitioner. On prudence check it was found that Licensee has submitted Billing Determinants as per which the load	Noted for Compliance

SL.No.	Directive	Status of compliance / Petitioner's reply
	of each consumer is around 3 kW however, as per the Rate Schedule for Lifeline consumers the load has to be upto 1 kW per consumer. It was also found that sales per consumer is 45.5 Units per month which is within the limit as provided in the Rate Schedule. Therefore, the ABR has been determined considering load of 1 kW per consumer and sales as provided by the Licensee and is provided at Annexure - II. The Licensee is directed to ensure that such aberrations in the submissions do not occur in future. Also, the Commission will do appropriate treatment at the time of True-Up.	
9.2.2 (Page 514)	The Petitioner should ensure that it must at least achieve & maintain the category wise ABRs approved, failing which the Commission may take an appropriate view and necessary action.	The Company aggrieved by the Order of the Commission has filed an appeal before the Hon'ble APTEL which is sub judice.

10.3 DIRECTIVES ISSUED IN THIS ORDER

10.3.1 The Commission directs the Petitioner to not to purchase power under High Price Day Ahead Market (HP- DAM) in the integrated Day Ahead Market (I-DAM) segment.

10.3.2 The Commission directs the Petitioner not to contract any Long-Term PPA beyond the license period i.e, June 29, 2029.

10.3.3 The Petitioners are directed to show SOP and CGRF expenses separately in the audited accounts henceforth.

10.3.4 The Commission directs the Petitioner to not to book any excess sales in unmetered category.

10.3.5 The Commission observed that the Petitioner has not provided the detailed slab wise billing determinant (number of consumers, connected load and energy sales) along with revenue for ARR period for FY 2023-24. The Commission taking the note of the non-compliance & directs the Petitioner to provide the detailed slab/sub-slab wise billing determinants along with revenue from the next Tariff filling failing which will lead to the proceedings of the non-compliance of directive as per Regulations/Act.

10.3.6 The Commission directs the Petitioners to submit the voltage wise (440V, 11kV, 33kV, 66kV, 132 kV) - Energy Sales and Losses. Also, it is mandatory to submit energy audit report and the cost audit report (prepared in accordance with Companies (Cost Records and Audit) Rules 2014) along with the ARR / Tariff filing each year.

10.3.7 The Petitioners must submit the details of each investment scheme / project exceeding Rs. 10 Crore and obtain prior approval of the Commission as per Regulations for inclusion as regulatory expenditure in the ARR. Failure to do so will result in disallowance of such investment in order to safeguard the consumers from unjust and unfair charges.

10.3.8 The Commission directs the Petitioners to submit the detailed Fixed Asset Register (FAR) in excel with all the details of the assets opening, addition, deduction & closing values, as well as depreciation & cumulative depreciations, with the bifurcation of the assets owned by the Petitioner, assets created out of Grants and assets created out of consumer contribution.

10.3.9 The Petitioners are directed to ensure 100% feeder metering and DT metering and separation of agriculture feeders.

10.3.10 There is lack of clarity on the interest of security deposited that has been given to the consumers. Petitioners in its submission should clearly demonstrate how much interest on security deposit was required to be given and how much interest has been actually disbursed.

10.3.11 All procurements made by the Petitioners should be through Competitive Bidding only.

10.3.12 The Petitioners are directed to procure all power through tariff-based competitive bidding process, power exchange or DEEP Portal. As power purchase is dependent on the sales, and increase in sale above the approved limits would require additional power to be purchased from the Exchange. With regard to cost of the power, if the same is in approved limits of increase in sales approved by the Commission, Petitioners need not to take prior approval of the Commission. However, if Petitioners need to purchase the power beyond the approved limits then the Petitioners are required to take prior approval of the Commission irrespective of sources of power purchase.

10.3.13 There are several upcoming opportunities for the Licensees to enhance their non-tariff income particularly from the broadband and 5G telecom companies for installation of their equipment on the electric poles and infrastructure of the licensees. The licensees are directed to develop a business plan in this regard and submit the same for the approval of the Commission. The Commission may allow some part of this income as incentive to the licensee through revenue sharing based on implementation of the same. As similar scheme has already been approved by the Commission for UPPTCL.

10.3.14 The Petitioners shall upload on its website the Petition filed before the Commission along with all regulatory filings, information, particulars and related documents, which shall be signed digitally and in searchable pdf formats along with all Excel files and as per any other provision of the Regulations and Orders of the Commission. The Petitioner shall also ensure that these files are broken into such size which can be easily downloaded and will not keep them in compressed form as the stakeholders find it difficult to extract the files.

10.3.15 The Commission encourages the Petitioners to implement a few projects of battery storage. The Licensees are directed to seek innovative solutions based on energy storage systems, other innovative technologies to reduce the system losses, provide better services to the consumers etc.

10.3.16 Provide the details of all the pending cases filed by Petitioners against the Commission in various forums along with the status of the same with the ARR / Tariff filing each year.

10.3.17 The Commission directs the Petitioners to ensure to file its ARR/ Tariff Petition on time strictly in accordance with the applicable MYT Regulations, 2019.

10.3.18 The Petitioners are directed to submit DSM account details separately from the power purchase along with each ARR/ Tariff fillings.

10.3.19 Provide the details of land capitalized during the year, along with the purpose of usage and status of usage of land, along with the lease deed for each land capitalized. Also, provide the list of un-utilized land capitalized along with the ARR / Tariff filing each year.

10.3.20 Provide the list of Open Access consumers (Long Term, Short Term, Medium Term) along with their consumption and consumer category, along with Petition along with the ARR / Tariff filing each year.

10.3.21 Wherever the opening values in the audited account doesn't match with the closing shown in the previous audited account, the reasons for the same to be provided as part of audited accounts henceforth.

10.3.22 Provide the detailed breakup of CWIP claimed for the year along with the Petition along with the ARR / Tariff filing each year.

10.3.23 Submit the month-wise actual category / sub-category/ slab wise wise Billing Determinants (No. of Consumers, Connected Load & Sales) & actual Revenue for the year along with the future filings.

10.3.24 Submit the reconciliation of the actual O&M expenses (i.e. employee expenses, A&G expenses, R&M expenses) vis-à-vis the normative expenses for the year in the each future filings.

10.3.25 The Petitioners are directed to ensure that actual Power Purchased Cost with detailed break-up of each source, inter-state transmission charges, intra-state transmission charges are made part of the audited accounts.

10.3.26 Ensure that the actual category / sub-category wise Billing Determinants (No. of Consumers, Connected Load & Sales) & category wise actual Revenue are made part of the audited accounts henceforth.

10.3.27 The Petitioners are directed to ensure that actual Power Purchased (MUs) & ex-bus & energy delivered at Discom periphery (MUs), inter & intra power purchase (MUs) along with inter & intra state losses are made part of the audited accounts henceforth.

10.3.28 Submit the PPA's, Commission's approval and bills of each source from which power is procured, along with the future True-up / ARR petitions.

10.3.29 Provide the daily load curves and monthly load curves for last year along with the corresponding N2 region demand curves of exchange and based on this submit a report on the existing ToD time slabs along with the ARR / Tariff filing each year.

10.3.30 The Commission observed that the in the few formats the data is incomplete. Also, it has been observed that the Excel files are not linked and formula driven which delay the proceedings. Therefore, the Petitioner is directed to ensure that all the Tariff and additional Formats are completely filled and are with formulas and links.

10.3.31 The Petitioners are directed to submit a proposal in regard to the category / sub-category wise roadmap for cross-subsidy reduction and take steps to reduce such subsidy to +/- 20% of the Average Cost of Supply (ACos) in compliance with the provisions of the Tariff Policy, 2016.

10.3.32 The Petitioners are directed to enhance the quality of distribution network by employing state-of-the-art technology and contemporary technological solutions which is essential to address the upcoming and new challenges in the sector. Further, the Licensees are directed to focus on institutional capacity building, especially for operations related smart metering, prepaid charging infrastructure, demand response, time of use (TOU), cyber security and privacy of data, usage of AI tools etc. As part of this, inhouse Training Centers/ Programs need to be developed to widen the knowledge-base and upgradation competencies of their employees in line with the trend in technology implementation in the sector which will assist them in bridging the capacity gaps and reduce the reliance on outsourcing of such essential and sensitive services. The Petitioners are required to conduct trainings on SOP and CGRF of the concern and responsible.

10.3.33 The Petitioners shall file quarterly progress report before the Commission on SoP implementation as per UPERC (Standard of Performance) Regulations, 2019.

10.3.34 The Petitioners shall file quarterly progress report before the Commission on CGRF implementation as per UPERC (Consumer Grievance Redressal Forum) Regulations, 2019.

10.3.35 The Commission directs the Petitioners to follow the RPO trajectory set by the Commission in its First Amendment to the RPO Regulations, 2010 dated August 16, 2019 & any other Orders of the Commission and submit RPO compliance along with Tariff Fillings and other orders of the Commission from time to time.

10.3.36 The proceedings under Petition No. 780 of 2012 are going on in the matter of Security Deposit and the final Orders of the Commission will have a bearing on the Security Deposit treatments for the years that have been Trued Up and due to the above proceedings all approvals will be treated as provisional. The Petitioners are directed to make a detailed filing due to the impact of the final order in the above proceedings in the ARR / Tariff filings to be made after issuance of the final order.

10.3.37 The Commission directs that pre-paid meter/ smart meter be installed for all new connections or replacement of faulty meters.

10.3.38 100% metering is necessary condition for an efficient distribution network and financial viability of the distribution companies. The metering for all consumers should be completed by end of FY 2023-24.

10.3.39 The Commission directs the Petitioner, that the Open Access shall be allowed to those who wish to avail Open Access as per the provisions outlined by the Commission in its Regulations, Orders and any amendments from time to time.

10.3.40 The Commission directs the Petitioner to explore and start a pilot project in its area of supply for implementation of peer to peer (P2P) trading of electricity in rooftop solar energy using Blockchain Technology by following the '**Guidelines for peer-to-peer solar energy transaction through blockchain based platform dated April 05, 2023** issued for UPPCL / State Discoms.

10.3.41 The Petitioner is directed to provide complete details of energy managed through net metering on monthly basis including energy banked / adjusted and the amount / energy settled at the end of financial year and the treatment done for the same in the financial statements and regulatory submissions every year along with ARR/ Tariff filling.

10.3.42 The Petitioner is directed to do proper accounting with regard to MUs and rates of captive/ internal consumption of electricity and captured the same in the audited balance sheet under separate head. The Petitioner is also directed to submit the complete details viz MUs consumed, tariff and revenue booked along with every ARR / Tariff filling.

10.3.43 The Commission directs that the direction of earlier Tariff Orders which have not been complied shall be complied immediately.

10.3.44 Apart from the above directions the Petitioner to comply to the directions provided at various places in this Tariff Order.

11 APPLICABILITY OF THE ORDER

The Licensee, in accordance with Regulation 5.10 of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019, shall publish the Tariff approved by the Commission in at least two (2) English and two (2) Hindi daily newspapers having wide circulation in the area of supply and shall put up the approved Tariff on its internet website. The Petitioner is also required to submit the copies of the newspapers and screen shots of the website within 7 days of publication.

The Tariffs so published shall be in force after seven days from the date of such publication of the Tariffs and unless amended or revoked, shall continue to be in force till issuance of the next Tariff Order. The Commission may issue clarification / corrigendum / addendum to this Order as it deems fit from time to time with the reasons to be recorded in writing.

(Sanjay Kumar Singh)	(Vinod Kumar Srivastava)	(Raj Pratap Singh)
Member	**Member (Law)**	**Chairman**

Place: Lucknow

Date: May 24, 2023

SHAILENDRA GAUR

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Date: 2023.05.25 19:58:08 +05'30'

12 ANNEXURE

12.1 RATE SCHEDULE FOR FY 2023-24

Rate Schedule for FY 2023-24

(Applicable for NPCL)

A. GENERAL PROVISIONS:

These provisions shall apply to all categories unless specified otherwise and are integral part of the Rate Schedule.

1. NEW CONNECTIONS:

All new connections shall be given in kW, kVA, or BHP as agreed to be supplied by the Licensee. Further, if the contracted load (kW / kVA) of already existing consumer is in fractions then the same shall be treated as next higher kW / kVA load. If the contracted load is in kW and is being converted into kVA, the conversion factor of 0.90 will be used (kVA = kW / 0.90) for tariff application purposes and the same shall be rounded off up to two decimal places.

2. READING OF METERS:

As per applicable provisions of Electricity Supply Code 2005 and its amendments.

3. BILLING WHEN METER IS NOT MADE ACCESSIBLE:

A penalty of Rs. 50.00 / kW or as decided by the Commission through an Order shall be levied for the purposes of Clause 6.2 (c) of the applicable Electricity Supply Code 2005 and its amendments.

4. BILLING IN CASE OF DEFECTIVE METERS:

As per the applicable provisions of Electricity Supply Code 2005 and its amendments.

5. kVAh TARIFF:

'kVAh based tariffs' shall be applicable on all consumers having contracted load of 10 kW / 13.4 BHP and above, under different categories with TVM / TOD / Demand recording meters (as appropriate).

The rates prescribed in different categories in terms of kW and kWh will be converted into appropriate kVA and kVAh by multiplying Fixed / Demand Charges and Energy Charges by an average power factor of 0.90. Similarly, the Fixed /

Demand Charges expressed in BHP can be converted into respective kVA rates in accordance with formula given below:

Fixed Charges in kVA = (Fixed Charges in BHP / 0.746) * 0 .90

Fixed Charges in kVA = (Fixed Charges in kW * 0.90)

Energy Charges in kVAh = (Energy Charges in kWh * 0.90)

The converted rates (i.e., Energy Charge in Rs. / kVAh and Fixed / Demand Charges in Rs. / kVA) will be rounded up to two decimal places.

Further, for converting energy slabs of different categories specified in kWh to kVAh, average power factor of 0.90 will be used as a converting factor for converting each energy slab (specified in kWh) into energy slabs (in kVAh). The converted energy slabs (in kVAh) will be rounded to next higher kVAh.

Note 1: In case of kVAh billing only kVAh reading will be used for billing purpose.

Note 2: If the average power factor of a consumer in a billing cycle is leading and is within the range of 0.95 - 1.00, then for tariff application purposes such leading power factor shall be treated as unity. The bills of such consumers shall be prepared on kWh basis. However, if the leading power factor is below 0.95 (lead) then the consumer shall be billed as per the kVAh reading indicated by the meter. However, the aforesaid provision of treating power factor below 0.95 (lead) as the commensurate lagging power factor, for the purposes of billing, shall not be applicable on HV-3 category and shall be treated as unity. Hence, for HV-3, “lag only” logic of the meter should be used which blocks leading kVArh.

6. BILLABLE LOAD / DEMAND:

For all consumers having TVM / TOD / Demand recording meters installed, the billable load / demand during a month shall be the actual maximum load / demand as recorded by the meter (can be in parts of kW or kVA) or 75% of the contracted load / demand (kW or kVA), whichever is higher.

In case the Licensee’s meter reader does not note the actual maximum load / demand, then the Licensee will raise the bill at 75% of the contracted load and in cases where the consumer approaches the Licensee with a meter reading but does not provide the proof of actual maximum load / demand displayed on his meter, then in such case the Licensee will raise the bill at 100% of the contracted load.

Further in case a consumer feels that his maximum load / demand reading has been noted wrong, the consumer may approach the Licensee with a photo of the actual maximum load / demand reading displayed on his meter of the concerned month.

The Licensee shall accept the same for the purpose of computation of billable demand, however if the Licensee wishes to, it can get the same verified within 5 days.

7. SURCHARGE / PENALTY:

(i) DELAYED PAYMENT:

If a consumer fails to pay his electricity bill by the due date specified therein, a late payment surcharge shall be levied at 1.25% on the dues (excluding late payment surcharge) per month; up-to first three months of delay and subsequently at 2.00% on the dues (excluding late payment surcharge) per month of delay. Late payment surcharge shall be calculated proportionately for the number of days for which the payment is delayed beyond the due date specified in the bill and levied on the unpaid amount of the bill excluding delayed payment surcharge. Imposition of this surcharge is without prejudice to the right of the Licensee to disconnect the supply or take any other measure permissible under the law.

(ii) CHARGES FOR EXCEEDING CONTRACTED DEMAND:

a) If the maximum load / demand in any month of a **domestic consumer** having TVM / TOD / Demand recording meter exceeds the contracted load / demand, then such excess load / demand shall be levied equal to 100% of the normal rate apart from the normal Fixed / Demand Charge as per the maximum load / demand recorded by the meter. Further, if the consumer is found to have exceeded the contracted load / demand for continuous previous three months, the consumer shall be served a notice of one month advising him to get the contracted load enhanced as per the provisions of the Electricity Supply Code, 2005 and amendments thereof. However, the consumer shall be charged for excess load for the period the load is found to exceed the contracted load. The Licensee shall merge the excess load with the previously sanctioned load, and levy additional charges calculated as above, along with additional security. Subsequent action regarding the increase in contracted load, or otherwise shall be taken only after due examination of the consumer's reply to the notice and a written order in this respect by the Licensee.

b) If the maximum load / demand in any month, for the consumers of **other category (except (a) above)** having TVM / TOD / Demand recording meter exceeds the contracted load / demand, then such excess load / demand shall be levied equal to 200% of the normal rate apart from the normal Fixed / Demand Charge as per the maximum load / demand recorded by the meter.

c) Any surcharge / penalty shall be over and above the Minimum Charge, if the consumption bill of the consumer is being prepared on the basis of Minimum Charge.

d) Provided where no TVM / TOD / Demand recording meter is installed, the excess load / demand charge shall be levied as per the Electricity Supply Code, 2005 as amended from time to time.

8. POWER FACTOR SURCHARGE:

i. Power factor surcharge shall not be levied where consumer is being billed on kVAh consumption basis.

ii. It shall be obligatory for all consumers to maintain an average power factor of 0.90 or more during any billing period. No new connections of motive power loads / inductive loads above 3 kW, other than under LMV-1 and LMV-2 category, and / or of welding transformers above 1 kVA shall be given, unless shunt capacitors having I.S.I specifications of appropriate ratings are installed, as described in 'LIST OF POWER FACTOR APPARATUS' annexed to this Rate Schedule.

iii. In respect of the consumers with or without TVM / TOD / Demand recording meters, excluding consumers under LMV-1 category up to contracted load of 10 kW and LMV-2 category up to contracted load of 5 kW, if on inspection it is found that capacitors of appropriate rating are missing or in-operational and Licensee can prove that the absence of capacitor is bringing down the power factor of the consumer below the obligatory norm of 0.90; then a surcharge of 15% on the 'RATE' shall be levied on such consumers. Licensee may also initiate action under the relevant provisions of the Electricity Act, 2003, as amended from time to time.
Notwithstanding anything contained above, the Licensee also has a right to disconnect the power supply, if the power factor falls below 0.75.

iv. Power factor surcharge shall however, not be levied during the period of disconnection on account of any reason whatsoever.

9. PROTECTIVE LOAD AND PROTECTIVE LOAD CHARGE:

Consumers getting supply on independent feeder at 11kV & above voltage, emanating from sub-station, may opt for facility of protective load and avail supply during the period of scheduled rostering imposed by the Licensee, except under emergency rostering. An additional charge @ 100% of base demand charges shall be levied on the sanctioned protective load (as per Electricity Supply Code, 2005 and its amendments) per month as protective load charge. However, consumers of LMV-4 (A) - Public Institutions will pay the additional charge @ 25% of base demand charges only. During the period of scheduled rostering, the load shall not exceed the sanctioned protective load. In case the consumer exceeds the sanctioned protective load during scheduled rostering, he shall be liable to pay twice the prescribed additional charges for such excess load.

10. ROUNDING OFF:

All bills will be rounded off to the nearest rupee i.e. up to 49 paisa shall be rounded down to previous rupee and 50 paisa upwards shall be rounded up to next rupee. The difference due to such rounding shall be adjusted in subsequent bills.

11. OPTION OF MIGRATION TO HV-1 & HV-2 CATEGORY:

The consumer under LMV-2 and LMV-4 with contracted load above 50 kW and getting supply at 11 kV & above voltage shall have an option to migrate to the HV-1 category and LMV-6 consumers with contracted load above 50 kW and getting supply at 11 kV & above voltage shall have an option to migrate to the HV-2 category. Furthermore, the consumers shall have an option of migrating back to the original category on payment of charges prescribed in Cost Data Book for change in voltage level.

12. PRE-PAID METERS / AUTOMATIC METER READING SYSTEM:

(i) Any consumer having prepaid meters shall also be entitled to a discount of 2.00 % on the 'RATE' as defined in the Tariff Order.

(ii) The token charges for code generation for prepaid meters shall be Rs. 10.00/- per token or as decided by the Commission from time to time.

13. CONSUMERS NOT COVERED UNDER ANY RATE SCHEDULE OR EXPRESSLY EXCLUDED FROM ANY CATEGORY:

For consumers of light, fan & power (excluding motive power loads) not covered under any rate schedule or expressly excluded from any LMV rate schedule will be categorized under LMV-2.

14. A consumer under metered category may undertake any extension work, in the same premises, on his existing connection without taking any temporary connection as long as his demand does not exceed his contracted demand and the consumer shall be billed in accordance with the tariff applicable to that category of consumer.

15. REBATE ON PAYMENT ON OR BEFORE DUE DATE:

A rebate at the rate of 1.00 % on the 'RATE' shall be given in case the payment is made on or before the due date. However, a rebate at the rate of 5.00% on the 'RATE' shall be given to LMV-5 (Rural) (i.e. PTW Rural Category Agricultural Consumers) category of electricity consumers in case the payment is made on or before the due date. The consumers having any arrears in the bill shall not be entitled for this rebate. The consumers who have made advance deposit against their future monthly energy bills shall also be eligible for the above rebate applicable on the 'RATE'.

16. SCHEME FOR ADVANCE DEPOSIT FOR FUTURE MONTHLY ENERGY BILLS:

If a consumer intends to make advance deposit against his future monthly energy bills, the Licensee shall accept such payment and this amount shall be adjusted only towards his future monthly energy bills. On such advance deposit the consumers shall be paid interest, at the interest rate applicable on security deposit, for the period during which advance exists for each month on reducing balance method and amount so accrued shall be adjusted in the electricity bills which shall be shown separately in the bill of each month. Further, quarterly report regarding the same must be submitted to the Commission.

17. FACILITATION CHARGE FOR ONLINE PAYMENT:

(i) No transaction charge shall be collected from the consumers making their payment through internet banking.

(ii) The Licensees shall bear the transaction charges for transactions up to Rs. 4,000.00 for payment of bill through internet using Credit Card / Debit Card.

18. MINIMUM CHARGE:

Minimum Charge is the charge in accordance with the tariff in force from time to time and come into effect only when sum of Fixed / Demand Charges and Energy Charges are less than a certain prescribed amount i.e. Minimum Charges. For each month, consumer will pay an amount that is higher of the following:

- Fixed / Demand charges (if any) plus Energy Charge on the basis of actual consumption for the month and additional charges such as Electricity Duty, Regulatory Surcharges, FPPCA / Incremental Cost Surcharges and any other charges as specified by the Commission from time to time.

- Monthly Minimum Charge as specified by the Commission and computed at the contracted load and additional charges such as Electricity Duty, Regulatory Surcharges, FPPCA / Incremental Cost Surcharges and any other charges as specified by the Commission from time to time.

19. INTEREST ON DUES PAYABLE TO CONSUMER BY THE LICENSEE:

If a consumer becomes eligible for dues from the Licensee which may arise out of rectification / adjustment / settlement of bill(s), then such consumer will also be entitled to get interest at rate applicable for interest on security deposits on all the dues payable by the Licensee to the consumer. The Licensee shall compute the interest amount for the period during which such pending amounts exists and adjust such interest towards the future monthly bills of consumers. After adjustment of the interest amount in a particular month, the balance amount, will be carried forward to next month for adjustment with interest on balance amount. The details of such interest amount and adjustment made during the month shall be shown separately in the bill. Further, separate accounting of interest paid must be maintained by the Licensees.

20. DEFINITION OF RURAL SCHEDULE:

Rural Schedule means supply schedule as defined and notified by State Load Despatch Centre (SLDC), Lucknow from time to time.

21. GREEN ENERGY TARIFF:

a. The Commission had computed the Green Energy Tariff payable by opting consumers as Rs. 0.44 per kWh.

b. This Tariff will be applicable for all the opting consumers except domestic and agriculture consumers. This Tariff will be in addition to the regular Tariff as approved by the Commission.

c. However, such consumption cannot be taken into consideration in the RPO fulfilment of such consumers if any.

d. The consumer can request for opting out, however the same shall only be come into force after the issuance of Commission’s next Tariff Order.

e. Further, the Licensee will display the same separately in the bill as well as in the receipt of such consumers who opted for Green Energy Tariff, in addition to the Fixed / Demand Charges and Energy Charges. They will also keep a separate account for this tariff and separate item in their annual financial statements and provide the full details to the Commission every year along with the tariff filings.

22. REGULATORY DISCOUNT:

All the Consumers shall be entitled to a regulatory discount of 10% (Ten Percentage) on the 'Rate' i.e. on Fixed / Demand Charge and Energy Charge excluding Electricity Duty etc. and the same will be shown clearly in their bills.

B. RETAIL TARIFFS FOR FINANCIAL YEAR 2023-24

RATE SCHEDULE LMV – 1:

DOMESTIC LIGHT, FAN & POWER:

1. APPLICABILITY:

This schedule shall apply to:

a) Premises for residential / domestic purpose, Accommodation for Paying Guests for Domestic purpose (Excluding Guest Houses), Janata Service Connections, Kutir Jyoti Connections, Jhuggi / Hutments, Places of Worship (e.g. Temples, Mosques, Gurudwaras, Churches) and Electric Crematoria, Shelter Homes, orphanages, old age homes, Institutions run for mentally retarded and forsaken children. Non-commercial places occupied by religious persons, of any religion, are also entitled in this category, for a maximum load up to 5 kW, subject to the condition that such non-commercial place shall have a valid registration/recognition from a charitable trust.

b) Mixed Loads

i. 50 kW and above

a. Registered Societies, Residential Colonies / Townships, Residential Multi-Storied Buildings with mixed loads (getting supply at single point) with the condition that at least 70% of the total contracted load shall be exclusively for the purposes of domestic light, fan and power. The above mixed load, within 70%, shall also include the load required for lifts, water pumps and common lighting,

b. Military Engineer Service (MES) for Defence Establishments (Mixed load without any load restriction).

ii. Less than 50 kW

Except for the case as specified in Regulation 3.3 (e) of Electricity Supply Code, 2005 as amended from time to time, if any portion of the load is utilized for conduct of business for non-domestic purposes, then the entire energy consumed shall be charged under the rate schedule of higher charge.

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code, 2005 and its amendments.

3. RATE:

Rate, gives the fixed and energy charges at which the consumer shall be billed during the billing period applicable to the category:

(a) Consumers getting supply as per 'Rural Schedule':

1. **Lifeline consumers:** Consumers with contracted load upto 1 kW, energy consumption up to 100 kWh / month.

Description	Fixed Charge	Energy Charge
Load upto 1 kW and for consumption up to 100 kWh / month	Rs. 50.00 / kW/ month	Rs. 3.00 / kWh

2. **Others:** Other than Lifeline consumers (i.e. consumers who do not qualify under the criteria laid above for lifeline consumers)

Description	Fixed Charge	Energy Charge
i) Un-Metered	Rs. 500.00 / kW / month	-

<table>
<tr><th>Description</th><th>Consumption Range</th><th>Fixed Charge</th><th>Energy Charge</th></tr>
<tr><td rowspan="4">ii) Metered</td><td>Upto 100 kWh / month</td><td rowspan="4">Rs. 90.00 / kW / month</td><td>Rs. 3.35 / kWh</td></tr>
<tr><td>101 - 150 kWh / month</td><td>Rs. 3.85 / kWh</td></tr>
<tr><td>151 – 300 kWh / month</td><td>Rs. 5.00 / kWh</td></tr>
<tr><td>Above 300 kWh / month</td><td>Rs. 5.50 / kWh</td></tr>
</table>

(b) Supply at Single Point for bulk loads (50 kW and above, Supplied at any Voltage):

Description	Fixed Charge	Energy Charge
For Townships, Registered Societies, Residential Colonies, multi-storied residential complexes (including lifts, water pumps and common lighting within the premises) with loads 50 kW and above with the restriction that at least 70% of the total contracted load is meant exclusively for the domestic light, fan and power purposes and for Military Engineer Service (MES) for Defence Establishments (Mixed load without any load restriction).	Rs. 110.00 / kW / Month	Rs. 7.00 / kWh

The body seeking the supply at Single point for bulk loads under this category shall be considered as a deemed franchisee of the Licensee.

The deemed franchisee is required to provide to all its consumers and the Licensee, a copy of the detailed computation of the details of the amounts realized from all the individual consumers and the amount paid to the licensee for every billing cycle on half yearly basis. If he fails to do so, then the consumers may approach the Consumer Grievance Redressal Forum (CGRF) having jurisdiction over their local area for the redressal of their grievances.

The deemed franchisee shall arrange to get its account(s) audited by a Chartered Accountant mandatorily. The audited accounts will be made available to all the consumers of the deemed franchisee within 3 months of the closure of that financial year. If he fails to do so, then the consumers may approach the Consumer Grievance Redressal Forum (CGRF) having jurisdiction over their local area for the redressal of their grievances.

The deemed franchisee should separately meter the electricity supplied from back up arrangements like DG sets etc. The bill of its consumers should clearly depict the units and rate of electricity supplied through back up arrangement and electricity supplied through Licensee.

The deemed franchisee shall not disconnect the supply of electricity of its consumers on the pretext of defaults in payments related to other charges except for the electricity dues regarding the electricity consumed by its consumers and electricity charges for lift, water lifting pump, streetlight if any, corridor / campus lighting and other common facilities.

In case the deemed franchisee exceeds the contracted load / demand under the provisions of Clause 7(ii) – 'Charges for Exceeding Contracted Demand' of the General Provisions of this Rate Schedule, only in such case the deemed franchisee will recover the same from the individual members who were responsible for it on the basis of their individual excess demands.

(c) OTHER METERED DOMESTIC CONSUMERS:

1. **Lifeline consumers:** Consumers with contracted load of 1 kW, energy consumption up to 100 kWh / month.

Description	Fixed Charge	Energy Charge
Load upto 1 kW and for consumption up to 100 kWh / month	Rs. 50.00 / kW / month	Rs. 3.00 / kWh

2. **Others:** Other than Lifeline consumers (i.e. consumers who do not qualify under the criteria laid above for lifeline consumers)

Description	Consumption Range	Fixed Charge	Energy Charge
Metered	Upto 100 kWh / month	Rs. 110.00 / kW / month	Rs. 5.50 / kWh
	101 - 150 kWh / month		Rs. 5.50 / kWh
	151 – 300 kWh / month		Rs. 6.00 / kWh
	Above 300 kWh / month		Rs. 6.50 / kWh

Note: For all consumers under this category the maximum demand during the month recorded by the meter has to be essentially indicated in their monthly bills. However, this condition would be mandatory only in case meter reading is done by the Licensee. Accordingly, if the bill is being prepared on the basis of reading being submitted by the consumer, then the consumer would not be liable to furnish maximum demand during the month and his bill would not be held back for lack of data of maximum demand.

RATE SCHEDULE LMV– 2:

NON - DOMESTIC LIGHT, FAN AND POWER:

1. APPLICABILITY:

This schedule shall apply to all consumers using electric energy for Light, Fan and Power loads for Non-Domestic purposes, like all type of Shops including Patri Shopkeepers, Hotels, Restaurants, Private Guest Houses, Private Transit Hostels, Private Students Hostels, Marriage Houses, Show-Rooms, Commercial / Trading Establishments, Cinema and Theatres, Banks, Cable T.V. Operators, Telephone Booths / PCO (STD / ISD), Fax Communication Centres, Photo Copiers, Cyber Café, Private Diagnostic Centres including X-Ray Plants, MRI Centres, CAT Scan Centres, Pathologies and Private Advertising / Sign Posts / Sign Boards, Commercial Institutions / Societies, Automobile Service Centres, Coaching Institutes, Private Museums, Power Looms with less than 5 kW load and for all companies registered under the Companies Act, 1956 with loads less than 75 kW.

2. Character and Point of Supply:

As per the applicable provisions of Electricity Supply Code, 2005 and its amendments.

3. RATE:

Rate, gives the fixed and energy charges at which the consumer shall be billed during the billing period applicable to the category:

(a) Consumers getting supply as per 'Rural Schedule'

Description	Fixed charge	Energy charge)
Metered	Rs. 110.00 / kW / month	Rs. 5.50 / kWh

(b) In all other cases, including urban consumers and consumers getting supply through rural feeders but exempted from scheduled rostering / restrictions or through co-generating radial feeders in villages / towns.

Contracted Load	Fixed Charge	Consumption Range	Energy Charge
Up to 4 kW	Rs. 330.00 / kW / month	Upto 300 kWh / month	Rs. 7.50 / kWh
		Above 300 kWh / month	Rs. 8.40 / kWh
Above 4 kW	Rs. 450.00 / kW / month	Upto 1000 kWh / month	Rs. 7.50 / kWh
		Above 1000 kWh / month	Rs. 8.75 / kWh

** Minimum charge payable by a consumer under the category "(b) In all other cases "shall be Rs. 600.00 / kW / month (From April to September) and Rs. 475.00 / kW / month (From October to March).*

Note: For all consumers under this category the maximum demand during the month recorded by the meter has to be essentially indicated in their monthly bills. However, this condition would be mandatory only in case meter reading is done by the Licensee. Accordingly, if the bill is being prepared on the basis of reading being submitted by the consumer, then the consumer would not be liable to furnish maximum demand during the month and his bill would not be held back for lack of data on maximum demand.

4. REBATE TO POWER LOOMS (IF ANY):

Rebate (if any) to Power Loom consumers shall be provided in accordance with the applicable Government orders subject to adherence of provision of advance subsidy.

RATE SCHEDULE LMV -3:

PUBLIC LAMPS:

1. APPLICABILITY:

This schedule shall apply to Public Lamps including Street Lighting System, Road Traffic Control Signals, Lighting of Public Parks, etc. The street lighting in Harijan Bastis and Rural Areas are also covered by this rate schedule.

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code, 2005 and its amendments.

3. RATE:

Rate gives the fixed and energy charges (including the TOD rates as applicable to the hour of operation) at which the consumer shall be billed during the billing period applicable to the category:

(a) **Un-metered Supply:**

Description	Gram Panchayat	Nagar Palika and Nagar Panchayat	Nagar Nigam
To be billed on the basis of total connected load calculated as the summation of individual points	Rs. 2100.00 / kW or part thereof per month	Rs. 3200.00 / kW or part thereof per month	Rs. 4200.00 / kW or part thereof per month

(b) **Metered Supply:**

Description	**Gram Panchayat**		**Nagar Palika and Nagar Panchayat**		**Nagar Nigam**	
Metered	**Fixed Charges**	**Energy Charges**	**Fixed Charges**	**Energy Charges**	**Fixed Charges**	**Energy Charges**
	Rs. 200.00 / kW / month	Rs. 7.50 / kWh	Rs. 250.00 / kW / month	Rs. 8.00 / kWh	Rs. 250.00 / kW / month	Rs. 8.50 / kWh

TOD Rates applicable for the metered supply (% of Energy Charges):

18:00 hrs – 06:00 hrs	(+) 20%
06:00 hrs – 18:00 hrs	0%

4. For 'Maintenance Charges', 'Provision of Lamps' and 'Verification of Load' Point refer to 'PUBLIC LAMPS' annexed to this Rate Schedule.

RATE SCHEDULE LMV– 4:

LIGHT, FAN & POWER FOR PUBLIC INSTITUTIONS AND PRIVATE INSTITUTIONS:

1. APPLICABILITY:

Applicable for load less than 75 kW.

LMV- 4 (A) - PUBLIC INSTITUTIONS:

This schedule shall apply to:

(a) Government Hospitals / Government Research Institutions / Offices of the Government Organizations other than companies registered under Companies Act 1956.

(b) Government & Government aided (i) Educational Institutions (ii) Hostels (iii) Libraries.

(c) Religious and charitable trusts & Institutions having a valid registration under Section 12 AA & 30G issued by the Income Tax department including hospitals, colleges and those providing services free of cost or at the charges / structure of charges not exceeding those in similar Government operated institutions.

(d) Railway Establishments (excluding railway traction, industrial premises & Metro) such as Booking Centres, Railway Stations & Railway Research and Development Organization, Railway rest houses, Railway holiday homes, Railway inspection houses.

(e) All India Radio and Doordarshan.

(f) Guest houses of Government, Semi-Government, Public Sector Undertaking Organisations.

LMV-4 (B) - PRIVATE INSTITUTIONS:

This schedule shall apply to non-Government hospitals, nursing homes / dispensaries / clinics, private research institutes, and schools / colleges / educational institutes & charitable institutions / trusts not covered under **(A)** above**.**

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code, 2005 and its amendments.

3. RATE:

Rate, gives the fixed and energy charges at which the consumer shall be billed during the billing period applicable to the category:

Description	Fixed Charge	Energy Charge
(A) For Public Institutions	Rs. 300.00 / kW / month	Rs. 8.25 / kWh
(B) For Private Institutions	Rs. 350.00 / kW / month	Rs. 9.00 / kWh

RATE SCHEDULE LMV– 5:

SMALL POWER FOR PRIVATE TUBE WELLS / PUMPING SETS FOR IRRIGATION PURPOSES:

1. APPLICABILITY:

This schedule shall apply to all power consumers getting supply as per Rural / Urban Schedule for Private Tube-wells / Pumping Sets for irrigation purposes having a contracted load up to 25 BHP and for additional agricultural processes confined to Chaff-Cutter, Thresher, Cane Crusher and Rice Huller. This schedule shall also be applicable for separate PTW connection for registered Goshalas for load up to 5 BHP having separate light and fan connection with the condition that such Gaushala – Cow shed shall not be used for commercial purpose. All new connections under this category shall necessarily have the ISI marked energy efficient mono-bloc pump sets with capacitors of adequate rating to qualify for the supply. All existing pump sets shall be required to install capacitors of adequate rating.

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code, 2005 and its amendments.

3. RATE:

Rate gives the fixed and energy charges at which the consumer shall be billed during the billing period applicable to the category:

(A) For consumers getting supply as per **Rural Schedule**:

(i) Un-metered Supply

Description	Fixed Charge	Energy Charge
Un-Metered	Rs. 170.00 / BHP / month	-

* *Consumer under this category will be allowed a maximum lighting load of 120 watts*

(ii) Metered Supply

Description	Fixed Charges	Minimum Charges	Energy Charge
Metered	Rs. 70.00 / BHP / month	Rs. 160.00 / BHP / month	Rs. 2.00 / kWh

Note: *Minimum amount payable by a consumer under the category "Rural Schedule (Metered Supply) shall be Rs. 160.00 per BHP per month, till the installation of the meter. Regulatory Surcharge, Duty, Taxes etc. will be payable extra.*

(iii) Energy Efficient Pumps

Description	Fixed Charge	Minimum Charges	Energy Charge
Metered	Rs. 70.00 / BHP / month	Rs. 140.00 / BHP / month	Rs. 1.65 / kWh

Note: *Minimum amount payable by a consumer under the category "Rural Schedule (Energy Efficient Pumps) shall be Rs. 140.00 per BHP per month, till the installation of the meter. Regulatory Surcharge, Duty, Taxes etc. will be payable extra.*

(B) For consumers getting supply as per **Urban Schedule** (Metered Supply) including consumers getting supply through rural feeders exempted from scheduled rostering or through co-generating radial feeders in villages and towns.

Description	Fixed Charge	Minimum Charges	Energy Charge
Metered	Rs. 130.00 / BHP / month	Rs. 215.00 / BHP / month	Rs. 6.00 / kWh

Note: *Minimum amount payable by a consumer under the category "Urban Schedule (Metered Supply) shall be Rs. 215.00 per BHP per month, till the installation of the meter. Regulatory Surcharge, Duty, Taxes etc. will be payable extra.*

RATE SCHEDULE LMV– 6:

SMALL AND MEDIUM POWER:

1. APPLICABILITY:

This schedule shall apply to all consumers of electrical energy having a contracted load less than 100 HP (75 kW) for industrial / processing or agro-industrial purposes, power loom (load of 5 kW and above) and to other power consumers, not covered under any other rate schedule. Floriculture, Mushroom and Farming units with contracted load less than 100 BHP (75kW) shall also be covered under this rate schedule. This schedule shall also apply to pumping sets above 25 BHP.

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code, 2005 and its amendments.

3. RATE:

Rate, gives the fixed and energy charges (including the TOD rates as applicable to the hour of operation) at which the consumer shall be billed during the billing period applicable to the category:

(A) Consumers getting supply other than Rural Schedule:

Contracted Load	Fixed Charge	Energy Charge
Upto 20 kW	Rs. 290.00 / kW / month	Rs. 7.30 / kWh
Above 20 kW	Rs. 290.00 / kW / month	Rs. 7.30 / kWh

TOD Structure:

Summer Months (April to September)

Hours	% of Energy Charges
05:00 hrs – 11:00 hrs	(-) 15%
11:00 hrs – 17:00 hrs	0%
17:00 hrs – 23:00 hrs	(+) 15%
23:00 hrs – 05:00 hrs	0%

Winter Months (October to March)

Hours	% of Energy Charges
05:00 hrs – 11:00 hrs	0%
11:00 hrs – 17:00 hrs	0%
17:00 hrs – 23:00 hrs	(+) 15%
23:00 hrs – 05:00 hrs	(-) 15%

(B) Consumers getting supply as per Rural Schedule:

The consumer under this category shall be entitled to a rebate of 7.5% on 'RATE (Excluding the TOD rates as applicable to the hour of operation)' as given for 'Consumers getting supply other than Rural Schedule'. Further, no 'TOD RATE' shall be applicable for this category.

4. PROVISIONS RELATED TO SEASONAL INDUSTRIES:

Seasonal industries will be determined in accordance with the criteria laid down below. No exhaustive list can be provided but some examples of industries exhibiting such characteristics are sugar, ice, rice mill, kolhu and cold storage. The industries which operate during certain period of the year, i.e. have seasonality of operation, can avail the benefits of seasonal industries provided:

i) The load of such industry is above 13.4 BHP (for motive power loads) & 10 kW (other loads) and have Tri-vector Meters / TOD meters installed at their premises, however for Kolhu consumers such load is of 10 HP or above.

ii) The continuous period of operation of such industries shall be at least 4 (four) months but not more than 9 (nine) months in a financial year.

iii) Any prospective consumer, desirous of availing the seasonal benefit, shall specifically declare his season at the time of submission of declaration / execution of agreement mentioning the period of operation unambiguously.

iv) The seasonal period once notified cannot be reduced during the next consecutive 12 months. The off-season tariff is not applicable to composite units having seasonal and other category loads.

The off-season tariff is also not available to those units who have captive generation exclusively for process during season and who avail Licensees supply for miscellaneous loads and other non-process loads.

v) The consumer opting for seasonal benefit has a flexibility to declare his off-season maximum demand subject to a maximum of 25% of the contracted demand. The tariff rates (demand charge per kW / kVA and energy charge per kWh / kVAh) for such industries during off-season period will be the same as for normal period. Further, during the off-season period, fixed charges shall be levied on the basis of maximum demand recorded by the meter (not on normal billable demand or on percentage contracted demand). Rates for the energy charges shall however be the same as during the operational season. Further, first violation in the off-season would attract normal billable demand charges and energy charges calculated at the unit rate 50% higher than the applicable tariff during normal period but only for the month in which the consumer has defaulted. However, on second violation in the off-season, the consumer will be charged at the normal billable demand for the entire off-season and energy charges calculated at the unit rate 50% higher than the applicable tariff during normal period.

5. REBATE TO POWER LOOMS (IF ANY):

Rebate (if any) to Power Loom consumers shall be provided in accordance with the applicable Government orders subject to adherence of provision of advance subsidy.

6. FACTORY LIGHTING:

The electrical energy supplied shall also be utilized in the factory premises for lights, fans, coolers, etc. which shall mean and include all energy consumed for factory lighting in the offices, the main factory building, stores, time keeper’s office, canteen, staff club, library, crèche, dispensary, staff welfare centres, compound lighting, etc. No separate connection for the same shall be provided.

RATE SCHEDULE LMV– 7:

PUBLIC WATER WORKS:

1. APPLICABILITY:

This schedule shall apply to Public Water Works, Sewage Treatment Plants and Sewage Pumping Stations functioning under Jal Sansthan, Jal Nigam or other local bodies.

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code, 2005 and its amendments.

3. RATE:

(A) Consumers getting supply other than "Rural Schedule":

Rate gives the fixed and energy charges at which the consumer shall be billed during the billing period applicable to the category:

Description	Fixed Charge	Energy Charge
Metered	Rs. 375.00 / kW / month	Rs. 8.50 / kWh
Un - Metered	Rs. 3300.00 / BHP / month	-

(B) Consumers getting supply as per "Rural Schedule":

The consumer under this category shall be entitled to a rebate of 7.5% on 'RATE' as given for 'Consumer getting supply other than Rural Schedule'.

RATE SCHEDULE LMV – 8:

STATE TUBE WELLS / PANCHAYTI RAJ TUBE WELL & PUMPED CANALS:

1. APPLICABILITY:

(i) This schedule shall apply to supply of power for all State Tube wells, including Tube wells operated by Panchayti Raj, World Bank Tube wells, Indo Dutch Tube wells, Pumped Canals and Lift Irrigation schemes with contracted load less than 100 BHP (75 kW).

(ii) Laghu Dal Nahar having load above 100 BHP (75 kW).

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code, 2005 and its amendments.

3. RATE:

This Category has been merged with LMV- 7. For all such consumers LMV-7 rate schedule will be applicable.

4. For finding out net load during any quarter of the year for this category refer to 'STATE TUBE – WELLS' annexed to this Rate Schedule.

RATE SCHEDULE LMV – 9:

TEMPORARY SUPPLY:

1. APPLICABILITY:

A) Un-metered Supply for Illumination / Public Address / Temporary Shops in Melas:

This schedule shall apply to temporary supply of light, fan & power up to 20 KW, Public address system and illumination loads during functions, ceremonies and festivities and temporary shops, not exceeding three months.

B) Metered Supply for all other purposes:

This schedule shall apply to all temporary supplies of light, fan and power load for the purpose other than mentioned in (A) above.

This schedule shall also apply for power taken for construction purposes including civil work by all consumers and Govt. Departments.

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code, 2005 and its amendments.

3. RATE (SEPARATELY FOR EACH POINT OF SUPPLY):

Rate gives the fixed and energy charges at which the consumer shall be billed during the billing period applicable to the category:

A. Un-metered:

(i) Fixed charges for illumination / public address / ceremonies for load up to 20 kW per connection plus Rs. 100.00 per kW per day for each additional kW.	Rs. 4750.00 / day
(ii) Fixed Charges for temporary shops set-up during festivals / melas or otherwise and having load up to 2KW	Rs. 560.00 / day / shop

B. Metered*:

<table>
<tr><th>Description</th><th>Fixed Charge</th><th>Energy Charge</th></tr>
<tr><td rowspan="2">Individual Residential construction</td><td>Rs. 200.00 / kW / Month</td><td>Rs. 8.00 / kWh</td></tr>
<tr><td colspan="2">From 3rd year onwards: Base Tariff applicable for current year plus additional 10% of the applicable Energy Charge.</td></tr>
<tr><td rowspan="2">Others</td><td>Rs. 300.00 / kW / Month</td><td>Rs. 9.00 / kWh</td></tr>
<tr><td colspan="2">From 3rd year onwards: Base Tariff applicable for current year plus additional 10% of the applicable Energy Charge.</td></tr>
</table>

**Minimum bill payable by a consumer under the category "Metered" shall be Rs. 450.00 / kW / week.*

4. Charge/Rate as specified, above shall be paid by the consumer in advance.

RATE SCHEDULE LMV- 11:

ELECTRIC VEHICLE CHARGING

1. **Domestic Consumers**

   All the metered domestic consumers covered under the LMV-1 category will be allowed to charge their Electric Vehicle at their residence, provided the load of Electric Vehicle does not exceed the connected / contracted load. The Tariff that is applicable as per the rate schedule will be applicable on Electric Vehicle Charging as well.

2. **Multi Storey Buildings (covered under LMV-1b & HV-1b of the Rate Schedule)**

   Those who wish to install Electric Vehicle Charging station in the premises Multi Storey Building, will have to take a separate connection for EV Charging Station. The Tariff applicable for such Charging Station in the Multi Storey Building will be as follows:

Category	Demand Charge	Energy Charge
Multi Story Buildings (Covered under LMV-1b)	-	Rs. 6.20 / kWh
Multi Story Buildings (Covered under HV-1b)	-	Rs. 5.90 / kWh

The consumer will be required to pay one-time charges etc. wherever applicable.

3. **Public Charging Stations**

   The Tariff applicable for Public Charging Stations will be as follows:

Category	Demand Charge	Energy Charge
Public Charging Station (LT)	-	Rs. 7.70 / kWh
Public Charging Station (HT)	-	Rs. 7.30 / kWh

The consumer will be required to pay one-time charges etc. wherever applicable.

Time of Day (ToD) Structure for public Charging Stations:

Summer Months (April to September)

Hours	% of Energy Charges
05:00 hrs – 11:00 hrs	(-) 15%
11:00 hrs – 17:00 hrs	0%
17:00 hrs – 23:00 hrs	(+) 15%
23:00 hrs – 05:00 hrs	0%

Winter Months (October to March)

Hours	% of Energy Charges
05:00 hrs – 11:00 hrs	0%
11:00 hrs – 17:00 hrs	0%
17:00 hrs – 23:00 hrs	(+) 15%
23:00 hrs – 05:00 hrs	(-) 15%

4. Other Consumers

The consumers of other categories (any metered consumers of LMV-2, LMV-4, LMV-6, LMV-7, LMV-8 (Metered), LMV-9 (Metered), HV-1 (excluding Multi Storey Buildings covered under LMV-1b & HV-1b of the Rate Schedule), HV-2, HV-3 and HV-4), will be charged as per the Tariff applicable for their respective category or to say they need not to take a separate connection, they can do the Charging within their respective connections, provided the load of EV does not exceed the connected / contracted load.

Note: It is advised that the consumer should take precaution to take adequate contracted load in order to meet the load of Charging of Electrical Vehicle. In case the contracted / connected load is breached then the consumer will be liable to pay penalty. Further, the other provisions of General Provisions of Rate Schedule and Electricity Supply Code will also come into effect in case consumers load breaches the contract demand.

RATE SCHEDULE HV– 1:

NON - INDUSTRIAL BULK LOADS

1. APPLICABILITY:

This rate schedule shall apply to:

(a) Commercial loads (as defined within the meaning of LMV-2) with contracted load of 75 kW & above and getting supply at single point on 11 kV & above voltage levels.

(b) Private institutions (as defined within the meaning of LMV-4 (b)) with contracted load of 75 kW & above and getting supply at single point on 11 kV & above voltage levels.

(c) Non domestic bulk power consumer (other than industrial loads covered under HV-2) with contracted load 75 kW & above and getting supply at single point on 11 kV & above voltage levels and feeding multiple individuals (owners / occupiers / tenants of some area within the larger premises of the bulk power consumer) through its own network and also responsible for maintaining distribution network.

(d) Public institutions (as defined within the meaning of LMV-4 (a)) with contracted load of 75 kW & above and getting supply at single point on 11 kV & above voltage levels. The institution / consumer seeking the supply at Single point for non-industrial bulk loads under this category shall be considered as a deemed franchisee of the Licensee.

(e) Registered Societies, Residential Colonies / Townships, Residential Multi-Storied Buildings with mixed loads (getting supply at single point) with contracted load 75 kW & above and getting supply at single point on 11 kV & above voltage levels and having less than 70% of the total contracted load exclusively for the purposes of domestic light, fan and power. Figure of 70%, shall also include the load required for lifts, water pumps and common lighting,

For Offices / Buildings / Guesthouses of UPPCL / UPRVUNL / UPJVNL / UPPTCL / Distribution Licensees having loads above 75 kW and getting supply at 11 kV & above voltages.

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code, 2005 and its amendments.

3. RATE:

Rate, gives the demand and energy charges at which the consumer shall be billed during the billing period applicable to the category:

(a) Commercial Loads / Private Institutions / Non - domestic bulk power consumer with contracted load 75 kW & above and getting supply at Single Point on 11 kV & above:

Contracted Load	Fixed Charge	Energy Charge
For supply at 11kV	Rs. 430.00 / kVA / month	Rs. 8.32 / kVAh
For supply above 11kV	Rs. 400.00 / kVA / month	Rs. 8.12 / kVAh

(b) Public Institutions, Registered Societies, Residential Colonies / Townships, Residential Multi-Storied Buildings including Residential Multi-Storied Buildings with contracted load 75 kW & above and getting supply at Single Point on 11 kV & above voltage levels:

Contracted Load	Fixed Charge	Energy Charge
For supply at 11kV	Rs. 380.00 / kVA / month	Rs. 7.70 / kVAh
For supply above 11kV	Rs. 360.00 / kVA / month	Rs. 7.50/ kVAh

The body seeking the supply at Single point for bulk loads under this category shall be considered as a deemed franchisee of the Licensee.

The deemed franchisee is required to provide to all its consumers and the licensee, a copy of the detailed computation of the details of the amounts realized from all the individual consumers and the amount paid to the licensee for every billing cycle on half yearly basis. If he fails to do so, then the consumers may approach the Consumer Grievance Redressal Forum (CGRF) having jurisdiction over their local area for the redressal of their grievances.

The deemed franchisee shall arrange to get its account(s) audited by a Chartered Accountant mandatorily. The audited accounts will be made available to all the consumers of the deemed franchisee within 3 months of the closure of that financial year. If he fails to do so, then the consumers may approach the Consumer Grievance Redressal Forum (CGRF) having jurisdiction over their local area for the redressal of their grievances.

The deemed franchisee should separately meter the electricity supplied from back up arrangements like DG sets etc. The bill of its consumers should clearly depict the units and rate of electricity supplied through back up arrangement and electricity supplied through Licensee.

The deemed franchisee shall not disconnect the supply of electricity of its consumers on the pretext of defaults in payments related to other charges except for the electricity dues regarding the electricity consumed by its consumers and electricity charges for lift, water lifting pump, streetlight if any, corridor / campus lighting and other common facilities.

In case the deemed franchisee exceeds the contracted load / demand under the provisions of Clause 7(ii) – 'Charges for Exceeding Contracted demand' of the General Provisions of this Rate Schedule, only in such case the deemed franchisee will recover the same from the individual members who were responsible for it on the basis of their individual excess demands.

RATE SCHEDULE HV– 2:

LARGE AND HEAVY POWER:

1. APPLICABILITY:

This rate schedule shall apply to all consumers with contracted load of 75 kW (100 BHP) and above for industrial and / or processing purposes as well as to Arc / induction furnaces, rolling / re-rolling mills, mini-steel plants and Floriculture, Mushroom and Farming units and to any other HT consumer not covered under any other rate schedule.

Supply to Induction and Arc furnaces shall be made available only after ensuring that the loads sanctioned are corresponding to the load requirement of tonnage of furnaces. The minimum load of one-ton furnace shall in no case be less than 400 kVA and all loads will be determined on this basis. No supply will be given on loads below this norm.

For all HV-2 consumers, conditions of supply, apart from the rates, as agreed between the Licensee and the consumer shall continue to prevail as long as they are in line with the existing Regulations & Acts.

2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code, 2005 and its amendments.

3. RATE:

Rate, gives the demand and energy charges (including the TOD rates as applicable to the hour of operation) at which the consumer shall be billed during the billing period applicable to the category:

(A) Urban Schedule:

	For supply up to 11 kV	For supply above 11 kV and up to 66 kV	For supply above 66 kV and up to 132 kV	For supply above 132 kV
BASE RATE				
Demand Charges	Rs. 300.00 / kVA / month	Rs. 290.00 / kVA / month	Rs. 270.00 / kVA / month	Rs. 270.00 / kVA / month
Energy Charges	Rs. 7.10 / kVAh	Rs. 6.80 / kVAh	Rs. 6.40 / kVAh	Rs. 6.10 / kVAh

TOD Structure:

Summer Months (April to September)

Hours	% of Energy Charges
05:00 hrs – 11:00 hrs	(-) 15%
11:00 hrs – 17:00 hrs	0%
17:00 hrs – 23:00 hrs	(+) 15%
23:00 hrs – 05:00 hrs	0%

Winter Months (October to March)

Hours	% of Energy Charges
05:00 hrs – 11:00 hrs	0%
11:00 hrs – 17:00 hrs	0%
17:00 hrs – 23:00 hrs	(+) 15%
23:00 hrs – 05:00 hrs	(-) 15%

(B) Rural Schedule:

This schedule shall be applicable only to consumers getting supply up to 11 kV as per 'Rural Schedule'. The consumer under this category shall be entitled to a rebate of 7.5% on 'BASE RATE' as given for 11 kV consumers under urban schedule. Further, no 'TOD RATE' shall be applicable for this category.

(C) Consumers already existing under HV-2 category with metering arrangement at low voltage:

Existing consumer under HV-2 with metering at 0.4 kV shall be required to pay as per schedule applicable to 11 kV consumers under HV-2 category.

4. PROVISIONS RELATED TO SEASONAL INDUSTRIES:

Seasonal industries will be determined in accordance with the criteria laid down below. No exhaustive list can be provided but some examples of industries exhibiting such characteristics are sugar, ice, rice mill and cold storage. The industries which operate during certain period of the year, i.e. have seasonality of operation, can avail the benefits of seasonal industries provided:

i. The continuous period of operation of such industries shall be at least 4 (four) months but not more than 9 (nine) months in a financial year.

ii. Any prospective consumer, desirous of availing the seasonal benefit, shall specifically declare his season at the time of submission of declaration / execution of agreement mentioning the period of operation unambiguously.

iii. The seasonal period once notified cannot be reduced during the next consecutive 12 months. The off-season tariff is not applicable to composite units having seasonal and other category loads.

iv. The off-season tariff is also not available to those units who have captive generation exclusively for process during season and who avail Licensees supply for miscellaneous loads and other non-process loads.

v. The consumer opting for seasonal benefit has a flexibility to declare his off seasonal maximum demand subject to a maximum of 25% of the contracted demand. The tariff rates (demand charge per kW / kVA and energy charge per kWh / kVAh) for such industries during off-season period will be the same as for normal period. Further, during the off season fixed charges shall be levied on the basis of maximum demand recorded by the meter (not on normal billable demand or on percentage contracted demand). Rates for the energy charges shall however be the same as during the operational season. Further, first violation in the off-season would attract full billable demand charges and energy charges calculated at the unit rate 50% higher than the applicable tariff during normal period but only for the month in which the consumer has defaulted. However, on second violation in the off-season, the consumer will forfeit the benefit of seasonal rates for the entire season and energy charges shall be calculated at the unit rate 50% higher than the applicable tariff during normal period.

5. FACTORY LIGHTING:

The electrical energy supplied shall also be utilized in the factory premises for lights, fans, coolers, etc. which shall mean and include all energy consumed for factory lighting in the offices, the main factory building, stores, time keeper's office, canteen, staff club, library, crèche, dispensary, staff welfare centres, compound lighting, etc. No separate connection for the same shall be provided.

RATE SCHEDULE HV – 3:

A: RAILWAY TRACTION:

1. APPLICABILITY:

This schedule shall apply to the Railways for Traction loads only.

2. CHARACTER OF SERVICE AND POINT OF SUPPLY:

Alternating Current, single phase, two phase or three phase, 50 cycles, 132 kV or below depending on the availability of voltage of supply and the sole discretion of the Licensee. The supply at each sub-station shall be separately metered and charged.

3. RATE:

Rate, gives the demand and energy charges at which the consumer shall be billed for consumption during the billing period applicable to the category:

Description	Charges
Demand Charge	Rs. 400.00 / kVA / month
Energy Charge	Rs. 8.50 / kVAh

Note: *Minimum charge payable by a consumer under this category shall be Rs. 950.00 / kVA / month.*

4. DETERMINATION OF THE DEMAND:

Demand measurement at a particular time will be made on basis of simultaneous maximum demands recorded in summation kilovolt-ampere meter installed at contiguous substation serviced by same grid transformer.

The maximum demand for any month shall be defined as the highest average load measured in Kilo Volt amperes during any fifteen consecutive minutes period of the month.

B: METRO RAIL CORPORATION:

1. APPLICABILITY:

This schedule shall apply to the Metro Rail Corporation.

2. CHARACTER OF SERVICE AND POINT OF SUPPLY:

Alternating Current, single phase, two phase or three phase, 50 cycles, 132 kV or below depending on the availability of voltage of supply and the sole discretion of the Licensee. The supply at each sub-station shall be separately metered and charged.

3. RATE:

Rate, gives the energy charges at which the consumer shall be billed for consumption during the billing period applicable to the category:

Description	Charges
Demand Charges	Rs. 300.00 / kVA / month
Energy Charges	Rs. 7.30 / kVAh

Note: *Minimum charge payable by a consumer under this category shall be Rs. 900.00 / kVA / month.*

- Penalty @ Rs. 540.00 / kVA / month will be charged on excess demand, if maximum demand exceeds contracted load.

4. DETERMINATION OF THE DEMAND:

Demand measurement shall be made by suitable kilovolt ampere indicator at the point of delivery. The demand for any month shall be defined as the highest average load measured in Kilo Volt Amperes during any fifteen consecutive minutes period of the month.

RATE SCHEDULE HV – 4:

LIFT IRRIGATION WORKS:

1. **APPLICABILITY:**

   This Rate Schedule shall apply to medium and large pumped canals with contracted load of 100 BHP (75kW) and above.

2. **CHARACTER OF SERVICE & POINT OF SUPPLY:**

   As per applicable provisions of Electricity Supply Code, 2005 and its amendments.

3. **RATE:**

   Rate, gives the demand and energy charges at which the consumer shall be billed during the billing period applicable to the category:

   (a) Demand Charges:

Voltage Level	Charges
For supply at 11 kV	Rs. 350.00 / kVA / month
For supply above 11 kV upto 66 kV	Rs. 340.00 / kVA / month
For supply above 66 kV upto 132 kV	Rs. 330.00 / kVA / month

   (b) Energy Charges:

Voltage Level	Charges
For supply at 11 kV	Rs. 8.50 / kVAh
For supply above 11 kV upto 66 kV	Rs. 8.40 / kVAh
For supply above 66 kV upto 132 kV	Rs. 8.25 / kVAh

c) Minimum Charges:
Minimum charge payable by a consumer under this category shall be Rs. 1125.00 / kVA / month irrespective of supply voltage.

4. DETERMINATION OF THE DEMAND:

Demand measurement shall be made by suitable kilovolt ampere indicator at the point of supply. In the absence of suitable demand indicator, the demand as assessed by the Licensee shall be final and binding. If, however, the number of circuits is more than one, demand and energy measurement will be done on the principle of current transformer summation metering.

C. PUBLIC LAMPS:

1. MAINTENANCE CHARGE:

In addition to the "Rate of Charge" mentioned above, a sum of Rs. 10.00 per light point per month will be charged for operation and maintenance of street lights. This Maintenance Charge will cover only labour charges, where all required materials are supplied by the local bodies. However, the local bodies will have an option to operate and maintain the public lamps themselves and, in such case, no maintenance charge shall be recovered. This charge shall not apply to the consumers with metered supply.

2. PROVISION OF LAMPS:

Streets where distribution mains already exist, the Licensee will provide a separate single-phase, 2-wire system for the street lights including light fitting and incandescent lamps of rating not exceeding 100 Watts each. In case the above maintenance charge is being levied, the labour involved in replacements or renewal of lamps shall be provided by the Licensee. However, all the required materials shall be provided by the local bodies. The cost of all other types of street light fittings shall be paid by the local bodies.

The cost involved in extension of street light mains (including cost of sub - stations, if any) in areas where distribution mains of the Licensee have not been laid, will be paid for by the local bodies.

3. VERIFICATION OF LOAD:

The number of light points including that of traffic signals together with their wattage will be verified jointly by the representatives of Licensee and Town Area / Municipal Board / Corporation at least once in a year. However, additions will be intimated by the Town Area / Municipal Board / Corporation on monthly basis. The Licensee will carry out the checking of such statements to satisfy themselves of the correctness of the same. The monthly bills shall be issued on the basis of verified number of points at the beginning of the year and additions, if any, during the months as intimated above. The difference, if any, detected during joint verification in the following year shall be reconciled and supplementary bills shall be issued.

Further, if the authorized representative of concerned local body does not participate in the work of verification of light points, a notice will be sent by concerned Executive Engineer in writing to such local bodies for deputing representative on specific date(s), failing which the verification of the light points shall be done by the concerned representative of Licensee which shall be final and binding upon such local body.

D. STATE TUBE-WELLS

NET LOAD:

(i) Net load hereinafter shall mean the total load connected during the quarter less the load of failed and abandoned tube-wells accounted for during that quarter.

(ii) The connected load as on 31ST March of the preceding year will be worked out on the basis of 'Net load' reported by the Executive Engineers of concerned Divisions after joint inspection and verification of the same by the concerned officers of the State Government / Panchayat, joint meter reading shall also be taken during the inspection on quarterly basis. The monthly bills for three months of the first quarter will be issued on the connected load worked out as such at the above rates. The same process shall be repeated for subsequent quarters.

E. SCHEDULE OF MISCELLANEOUS CHARGES

S. No.	NATURE OF CHARGES	UNIT	RATES (₹)
1.	Checking and Testing of Meters:		
	a. Single Phase Meters	Per Meter	50.00
	b. Three Phase Meters	Per Meter	50.00
	c. Recording Type Watt-hour Meters / Prepaid Meters / Smart Meters	Per Meter	175.00
	d. Maximum Demand Indicator	Per Meter	350.00
	e. Tri-vector Meters	Per Meter	1000.00
	f. Ammeters and Volt Meters	Per Meter	50.00
	g. Special Meters / Net Meters	Per Meter	400.00
	h. Initial Testing of Meters	Per Meter	NIL
2.	Disconnection and Reconnection of supply for any reason whatsoever (Disconnection & Reconnection to be separately treated as single job)		
	a. Consumer having load above 100 BHP/75kW	Per Job	1000.00
	b. Power consumers up to 100BHP/75kW	Per Job	500.00
	c. All other categories of consumers.	Per Job	300.00
	d. Smart Meters consumers having load upto 5 kW	Per Job	50.00
	e. Smart Meters consumers having load above 5 kW	Per Job	100.00
	f. Pre-Paid Meters	Per Job	NIL
3.	Replacement of Meters:		

S. No.	NATURE OF CHARGES	UNIT	RATES (₹)
	a. By higher capacity Meter	Per Job	50.00
	b. Installation of Meter and its subsequent removal in case of Temporary Connections	Per Job	75.00
	c. Changing of position of Meter Board at the consumer's request	Per Job	100.00
4.	Service of Wireman:		
	a. Replacement of Fuse	Per Job	20.00
	b. Inserting and Removal of Fuse in respect of night loads.	Per Job	25.00
	c. Hiring of services by the consumer during temporary supply or otherwise.	Per wireman /day of 6 Hrs.	60.00
5.	Resealing of Meters on account of any reason in addition to other charges payable in terms of other provision of charging of penalties, etc.)	Per Meter	100.00
6.	Checking of Capacitors (other than initial checking) on consumer's request:		
	a. At 400 V / 230 V	Per Job	100.00
	b. At 11 kV and above.	Per Job	200.00

F. LIST OF POWER FACTOR APPARATUS

FOR MOTORS:

S. No.	Rating of Individual Motor	kVAR Rating of Capacitor			
		750 RPM	1000 RPM	1500 RPM	3000 RPM
1.	Up to 3 HP	1	1	1	1
2.	5 HP	2	2	2	2
3.	7.5 HP	3	3	3	3
4.	10 HP	4	4	4	3
5.	15 HP	6	5	5	4
6.	20 HP	8	7	6	5
7.	25 HP	9	8	7	6
8.	30 HP	10	9	8	7
9.	40 HP	13	11	10	9
10.	50 HP	15	15	12	10
11.	60 HP	20	20	16	14
12.	75 HP	24	23	19	16
13.	100 HP	30	30	24	20
14.	125 HP	39	38	31	26
15.	150 HP	45	45	36	30
16.	200 HP	60	60	48	40

FOR WELDING TRANSFORMERS:

S. No.	Name Plate Rating in kVA of Individual Welding Transformer	Capacity of the Capacitors (kVAR)
1.	1	1
2.	2	2
3.	3	3
4.	4	3
5.	5	4
6.	6	5
7.	7	6
8.	8	6
9.	9	7
10.	10	8
11.	11	9
12.	12	9
13.	13	10
14.	14	11

S. No.	Name Plate Rating in kVA of Individual Welding Transformer	Capacity of the Capacitors (kVAR)
15.	15	12
16.	16	12
17.	17	13
18.	18	14
19.	19	15
20	20	15
21.	21	16
22.	22	17
23.	23	18
24.	24	19
25.	25	19
26.	26	20
27.	27	21
28.	28	22

S. No.	Name Plate Rating in kVA of Individual Welding Transformer	Capacity of the Capacitors (kVAR)
29.	29	22
30.	30	23
31.	31	24
32.	32	25
33.	33	25
34.	34	26
35.	35	27

12.2 ANNEXURE – I

CATEFORY / SUB-CATEGORY WISE CONSOLIDATED FOR NPCL AVERAGE BILLING RATE (ABR) FOR FY 2023-24

Consumer Sub-Category	Average Billing Rate
	Rs. / kWh
LMV-1: Domestic Light, Fan & Power	
Life Line Consumers (both Rural and Urban)	2.04
Dom: Rural Schedule (unmetered)	
Dom: Rural Schedule (metered) other than BPL	4.47
Dom: Supply at Single Point for Bulk Load	6.81
Other Metered Domestic Consumers other than BPL	6.18
LMV-2:Non Domestic Light, Fan & Power	
Non Dom: Rural Schedule	6.19
Non Dom: Other Metered Non-Domestic Supply	10.93
LMV-3: Public Lamps	
Gram Panchayat ##	9.12
Nagar Palika & Nagar Panchayat ##	9.12
Nagar Nigam	9.12
LMV-4: Light, fan & Power for Institutions	
Inst: Public	8.05
Inst: Private	9.76
LMV-5: Private Tube Wells/ Pumping Sets	
PTW: Rural Schedule (unmetered)	
PTW: Rural Schedule (metered)	2.03
Consumers getting supply as per "Urban Schedule (Metered Supply)"	7.05
LMV 6: Small and Medium Power upto 100 HP (75 kW) #	
Consumers getting supply other than "Rural Schedule" (Sub-Total)	
Connected Load upto 20 kW	8.07
Connected Load above 20 kW	7.89
LMV-7 & 8: Public Water Works, State Tube Wells & Pump Canals upto 100 HP #	
Urban Schedule (Meter)	9.56
Urban Schedule (Un-Meter)	
LMV-9: Temporary Supply	9.00
LMV-11: Electrical Vehicles	6.42

Consumer Sub-Category	**Average Billing Rate Rs. / kWh**
HV-1: Non-Industrial Bulk Loads	
Public Institutions	
Supply at 11 kV	7.04
Supply above 11 kV	9.36
Private Institutions	
Supply at 11 kV	7.60
Supply above 11 kV	9.32
HV-2: Large and Heavy Power above 100 BHP (75 kW) #	
HV2 Urban Schedule: Supply at 11 kV	7.50
HV2 Urban Schedule: Supply above 11 kV & upto 66 kV	6.84
HV2 Urban Schedule: Supply above 66 kV & upto 132 kV	6.51
HV2 Urban Schedule: Supply above 132 kV	
ABR Fixed Charges (340.97/3,315.59*10)	**1.03**
ABR Variable Charges (2072.25/3,315.59*10)	**6.25**
ABR Total (2413.23/3,315.59*10)	**7.28**

Note: ABR given in the above Table shall be used only for computation of Fuel Surcharge.
 # Rebate of 7.5% for 'Rural Scheduled Consumers'.
The Petitioner has not provided Billing Determinants for Gram Panchayat and Nagar Palika & Nagar Panchayat, hence ABR for these categories is considered ABR of Nagar Nigam.

ANNEXURE – II: ADMITANCE ORDER

BEFORE

THE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION, LUCKNOW

Petition No. 1919 /2022

(Date of Order: 28 -02-2023)

IN THE MATTER OF:

Truing-Up for FY 2021-22, Annual Performance Review (APR) for FY 2022-23 and Annual Revenue Requirement (ARR) for FY 2023-24 in the Petition No.-1919/2022 of Noida Power Company Limited (NPCL), Greater Noida.

ORDER

BACKGROUND:

The Electricity Act, 2003 under Section 64 stipulates that the Licensee shall file an application before the State Electricity Regulatory Commission to determine Tariff in such manner as specified by the Commission in the applicable Regulations.

The Commission notified the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution and Transmission) Regulations, 2019 (hereinafter referred as 'MYT Regulations, 2019') on September 23, 2019. The MYT Formats for determination of tariff under these regulations has been uploaded on the website of the Commission. Further, vide Letter No. UPERC/Secy/D(Tariff)/2022-23-1372 dated December 26, 2022 and E-mail dated September 29, 2022 the additional formats were provided to the Licensee. These Regulations shall be applicable for determination of tariff in all cases covered under these Regulations from April 1, 2020, to March 31, 2025, unless otherwise extended by the Commission.

The Petitioner in compliance to the provisions stipulated under the Regulation 4 of MYT Regulations, 2019, shall file the Petition before the Commission for determination of True-Up, Annual Performance Review (APR) and Aggregate Revenue Requirement (ARR) / Tariff for each year of the Control Period (FY 2020-21 to FY 2020-25) complete in all respect by November 30 of each year.

The Noida Power Company Limited (hereinafter referred to as 'NPCL'/ 'Petitioner') filed their ARR Petition for determination of True-Up for FY 2021-22, APR for FY 2022-23 and ARR & Tariff for FY 2023-24 before the Commission on November 30, 2022.

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PRELIMINARY OBSERVATION:

The Commission conducted a preliminary analysis of the ARR Petition filed for FY 2023-24 and raised data gap queries to the Petitioner through Deficiency Notes issued vide letter dated January 06, 2023, e-mail dated January 10, 2023 & February 08, 2023. The Commission in the data gap queries has asked the Petitioner to provide the information related to the reconciliation of power purchase cost with the audited accounts, calculation of arrears claimed under LTPPA in MS-Excel Format, impact of change in law under LTPPA, calculation of the energy sales booked for the unmetered category under the supply schedule of LMV-5, documentary evidence for DSM charged, reconciliation of component of O&M expenses with audited accounts, calculation of RPO in requisite format, reconciliation of the transmission charges with audited accounts, trading margin paid to traders for power procurement, projects/ schemes wise reconciliation of the actual capital expenditure with the approved capital capex, basis for calculation of consumer contribution, roadmap to meet the proposed revenue gap and other related matters to determine the ARR/Tariff for FY 2023-24.

LICENSEE RESPONSE:

The Petitioner vide Letter No. P-77A/ 2023/067 dated January 17, 2023 has requested to the Commission to grant additional time of 20 days (i.e., till February 06, 2023) to submit their replies to the Deficiency Note issued on their Petition for True Up for FY 2021-22, APR for FY 2022-23 and ARR & Tariff for FY 2023-24. The Commission grant the additional time to the Petitioner to submit their response on the 1st & 2nd Data Deficiency Notes issued on the ARR Petition of the NPCL for FY 2023-24.

The Petitioner vide letter No. P-77A/2023/075 dated February 06, 2023 has submitted their response to the 1st & 2nd Data Deficiency Note raised by the Commission. The Petitioner in response to the certification of energy input at ex-bus and NPCL periphery had submitted that the same is duly provided in Audited Cost Records. For Rs 5.12 Crore claimed towards change in law, the Petitioner has submitted the relevant order along with the bills. Regarding DSM charges, the Petitioner submitted the reconciliation of the DSM data with NRLDC along with the copies of claim raised by UPPTCL for FY 2021-22. For component wise reconciliation of O&M expenses the Petitioner submitted the reconciliation of O&M expenses, however, the submission made by the Petitioner was not in the format provided by the Commission, with regard to the reconciliation of scheme wise capex vis-à-vis approved in the Tariff Order, the Petitioner has submitted the scheme wise details.

The Technical Validation Session (TVS) was conducted on February 16, 2023 which was attended by senior officials of the Commission and NPCL. During the TVS, NPCL explained various issues raised in the data Deficiency Note on the ARR Petition of NPCL for FY 2023-24. Subsequently, Minutes of Meeting (MoM) for TVS was issued to the Petitioner vide email dated February 17, 2023. The pending data/information related to claim of O&M expense as per the format provided by the Commission, justification for considering escalation on fixed

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and energy charges on Power purchase cost, reconciliation of Capital Investment Plan with Audited accounts, etc. was asked additionally from the Petitioner in MoM of TVS.

COMMISSION'S DIRECTION:

Taking into consideration all of the above, the Commission admits the Petitions for further processing. The Commission directs NPCL to submit the pending responses immediately and also directs NPCL that it shall furnish further information / clarifications, if any, as deemed necessary by the Commission during the processing of the Petition and provide the same to the satisfaction of the Commission within the time frame as stipulated by the Commission, failing which the Commission may proceed to dispose of the matter as it deems fit based on the information available with it.

Regulation 5.8 of MYT Regulations, 2019 specifies as under:

Quote

5.8 The Petitioner shall within three working days of issue of the Admittance Order, publish a Public Notice in at least two English and two Hindi daily newspapers having wide circulation in its licence area, outlining the ARR, proposed Tariff, True-Up and such other matters as may be directed by the Commission, and inviting suggestions and objections from the stakeholders and public at large:

Provided that the Petitioner shall also upload on its website the Petition filed before the Commission along with all regulatory filings, information, particulars and documents in the manner stipulated by the Commission. The Petitioner should ensure that there is no requirement of providing personal information for downloading the same:

Unquote

Accordingly, the Petitioner shall, within three working days of issue of this Admittance Order, publish a Public Notice in at least two English and two Hindi daily newspapers having wide circulation in their licence areas, outlining the True-Up, ARR, approved and actual Distribution and Transmission losses for FY 2021-22 & 2022-23 along with proposed losses for FY 2023-24, Power Purchase Cost , Average Cost of Supply, Proposed tariff of each category / sub-category / slab of consumers, wheeling charges, cross subsidy surcharge and additional surcharge for Open Access consumers and such other matters, if any, as directed by the Commission, and invite suggestions and objections within 15 days from the date of publication of the Public Notice(s) from the stakeholders and public at large.

The Public Notices should indicate that the stakeholders should regularly check the websites of the Petitioners for further submissions made in respect to these proceedings.

The Petitioners shall upload on its website the Petition filed before the Commission along with all regulatory filings, information, particulars and related documents in their original version (not in zipped or compress folder), which shall be signed digitally and in searchable pdf formats along with all Excel files and as per any other provision of the Regulations and Orders of the Commission. The Petitioner shall also ensure that these files are broken into such size which can be easily downloaded and will not keep them in compressed form as the stakeholders find it difficult to extract the files.

In addition, the Petitioner shall also ensure that for downloading the same, there is no requirement of providing personal information. The Petitioner shall not provide or put up any such information, particulars, or documents, which are confidential in nature, without the prior approval of the Commission.

The Petitioner shall inform the Commission, about the details of publication of the Public Notice in the newspapers and uploading on the website along with the links. The Petitioner is also required to submit the copies of the newspapers and screen shots of the website within 7 days of publication of the Public Notice.

The Commission proposes to hold the Public Hearings in April, 2023, the details of which will be provided subsequently on the Commission's website www.uperc.org.

The Petitioner shall take all necessary steps to ensure the necessary arrangements for smooth functioning of the same in accordance with the guidelines / instructions issued in this regard by the Commission from time to time.

The Commission reserves the right to seek any further information / clarifications as deemed necessary during the processing of these Petitions.

(Vinod Kumar Srivastava)	**(Raj Pratap Singh)**
Member (Law)	**Chairman**

Place: Lucknow
Date: February 28, 2023

ANNEXURE – III: PUBLIC NOTICE ISSUED BY THE COMMISSION

U.P. Electricity Regulatory Commission

Vidyut Niyamak Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow - 226010

Ph : 0522-2720426, Fax : 0522-2720423, E-mail: secretary@uperc.org, www.uperc.org

Ref: UPERC/D(Tariff)/2023-24/1782 **Dated:** March 21, 2023

Public Notice

The Distribution licensees, viz. Dakshinanchal Vidyut Vitran Nigam Ltd. (DVVNL), Madhyanchal Vidyut Vitran Nigam Ltd. (MVVNL), Pashchimanchal Vidyut Vitran Nigam Ltd. (PVVNL), Purvanchal Vidyut Vitran Nigam Ltd. (PuVVNL), Kanpur Electricity Supply Company Ltd. (KESCO), Noida Power Company Ltd (NPCL) and the Transmission Licensee viz. Uttar Pradesh Power Transmission Company Limited, Lucknow (UPPTCL) have filed Petitions for determination of Aggregate Revenue Requirement (ARR) / Tariff for FY 2023-24, Annual Performance Review for FY 2022-23 and True-Up for FY 2021-22 before the Uttar Pradesh Electricity Regulatory Commission (UPERC / Commission).

The Commission vide Orders dated February 28, 2023, has admitted the Petitions and has decided to hold **"Public Hearings"** for inviting suggestions and objections from the stakeholders and public at large. The "**Public Hearings"** will be conducted as per below details:

Licensees Covered	Date & Time of Public Hearing	Place of Public Hearing
PuVVNL	April 10, 2023 (Monday) @ 11:30 Hrs	**Varanasi** - Commissioner Office Auditorium Opposite Vikas Bhavan, Hamrautia, Varanasi, Uttar Pradesh 221002
MVVNL & UPPTCL	April 21, 2023 (Friday) @ 11:30 Hrs	**Lucknow** - Auditorium (3rd Floor) of Uttar Pradesh Electricity Regulatory Commission, Vidyut Niyamak Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow – 226010
DVVNL & KESCO	April 27, 2023 (Thursday) @ 11:30 Hrs	**Agra** - Rao Krishna Pal Singh Auditorium R.B.S. College, Pushpa Vihar Colony, Khandari, Agra, Uttar Pradesh -282002
PVVNL & NPCL	April 28, 2023 (Friday) @ 11:30 Hrs	**Greater Noida** - Auditorium 3, Gautam Budh University, Opposite Yamuna Expressway, Greater Noida, Uttar Pradesh -201312

The licensee has already published the summary of the Petitions in newspapers, inviting suggestions and objections. The stakeholders & Public at large should regularly check the websites of Commission i.e. www.uperc.org & concerned Licensee for updates / information and details in regard to the venues of the 'Public Hearings'. All stakeholders and public at large are invited to attend the 'Public Hearings'.

All the Stakeholders who are participating in the Public Hearing shall also submit their written suggestions and objections in hard copies (one original + 5 sets of copies) along with verified affidavit (as prescribed) to the Secretary, UPERC within three (3) days of the Public Hearing. The submission should also be sent in PDF and Word / Excel format on the email id: office@uperc.org. It should be ensured that the Licensee name for whom the submission pertains to, is written in the subject line, otherwise it may not be taken into consideration.

Sanjay

Secretary

U.P. Electricity Regulatory Commission
Vidyut Niyamak Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow - 226010

Ph : 0522-2720426, Fax : 0522-2720423, E-mail: secretary@uperc.org, www.uperc.org

Ref: UPERC/D(Tariff)/2023-24/ 080

Dated: April 21, 2023

Public Notice in regard to change in Venue Address

With reference to the earlier Public Notice No. UPERC/D(Tariff)/2023-24/1782 dated March 21, 2023 regarding details of Public Hearings to be held in the matter of determination of Aggregate Revenue Requirement (ARR) / Tariff for FY 2023-24, Annual Performance Review for FY 2022-23 and True-Up for FY 2021-22 of all the Distribution & Transmission Licensees, due to unavoidable reasons, there has been a change in the time & venue which is detailed as below:

Licensees Covered	Existing Date & Time of Public Hearing	New Date & Time of Public Hearing	Existing Venue	New Venue
DVVNL & KESCO	April 27, 2023 (Thursday) **@ 11:30 Hrs**	April 27, 2023 (Thursday) **@ 11:00 Hrs**	**Agra -** Rao Krishna Pal Singh Auditorium R.B.S. College, Pushpa Vihar Colony, Khandari, Agra, Uttar Pradesh -282002	No change in venue
PVVNL & NPCL	April 28, 2023 (Friday) **@ 11.30 Hrs**	April 28, 2023 (Friday) **@ 11.00 Hrs**	**Greater Noida -** Auditorium 3, Gautam Budh University, Opposite Yamuna Expressway, Greater Noida, Uttar Pradesh - 201312	**Greater Noida -** Auditorium 1, Gautam Budh University, Opposite Yamuna Expressway, Greater Noida, Uttar Pradesh - 201312

Sanjay

Secretary

Uttar Pradesh Electricity Regulatory Commission
Vidyut Niyamak Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow - 226010
Ph : 0522-2720426, Fax : 0522-2720423, E-mail: secretary@uperc.org, www.uperc.org

Ref : UPERC/D (Tariff)/2023-24/1782 **Dated**: March 21, 2023

Public Notice

The Distribution licensees, viz. Dakshinanchal Vidyut Vitran Nigam Ltd. (DVVNL), Madhyanchal Vidyut Vitran Nigam Ltd. (MVVNL), Pashchimanchal Vidyut Vitran Nigam Ltd. (PVVNL), Purvanchal Vidyut Vitran Nigam Ltd. (PuVVNL), Kanpur Electricity Supply Company Ltd. (KESCO), Noida Power Company Ltd (NPCL) and the Transmission Licensee viz. Uttar Pradesh Power Transmission Company Limited, Lucknow (UPPTCL) have filed Petitions for determination of Aggregate Revenue Requirement (ARR) / Tariff for FY 2023-24, Annual Performance Review for FY 2022-23 and True-Up for FY 2021-22 before the Uttar Pradesh Electricity Regulatory Commission (UPERC / Commission).

The Commission vide Orders dated February 28, 2023, has admitted the Petitions and has decided to hold **"Public Hearings"** for inviting suggestions and objections from the stakeholders and public at large. The **"Public Hearings"** will be conducted as per below details:

Licensees Covered	Date & Time of Public Hearing	Place of Public Hearing
PuVVNL	April 10, 2023 (Monday) @ 11:30 Hrs	**Varanasi** - Commissioner Office Auditorium Opposite Vikas Bhavan, Hamrautia, Varanasi, Uttar Pradesh 221002
MVVNL & UPPTCL	April 21, 2023 (Friday)@ 11:30 Hrs	**Lucknow** - Auditorium (3rd Floor) of Uttar Pradesh Electricity Regulatory Commission, Vidyut Niyamak Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow — 226010
DVVNL & KESCO	April 27, 2023 (Thursday)@ 11:30 Hrs	**Agra** - Rao Krishna Pal Singh Auditorium R.B.S. College, Pushpa Vihar Colony, Khandari, Agra, Uttar Pradesh -282002
PVVNL & NPCL	April 28, 2023 (Friday) @ 11:30 Hrs	**Greater Noida** - Auditorium 3, Gautam Budh University, Opposite Yamuna Expressway, Greater Noida, Uttar Pradesh -201312

The licensee has already published the summary of the Petitions in newspapers, inviting suggestions and objections. The stakeholders & Public at large should regularly check the websites of Commission i.e. **www.uperc.org** & concerned Licensee for updates / information and details in regard to the venues of the 'Public Hearings'. All stakeholders and public at large are invited to attend the 'Public Hearings'.

All the Stakeholders who are participating in the Public Hearing shall also submit their written suggestions and objections in hard copies (one original + 5 sets of copies) along with verified affidavit (as prescribed) to the Secretary, UPERC within three (3) days of the Public Hearing. The submission should also be sent in PDF and Word / Excel format on the email id: **office@uperc.org**. It should be ensured that the Licensee name for whom the submission pertains to, is written in the subject line, otherwise it may not be taken into consideration.

Secretary