UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

LUCKNOW

Petition No. 1797/2021

APPROVAL OF AGGREGATE REVENUE REQUIREMENT (ARR) AND TARIFF FOR FY 2022-23

AND

TRUE-UP OF ARR AND REVENUE FOR FY 2020-21

FOR

Noida Power Company Limited., (NPCL) – (Petition No. – 1797/2021)

ORDER UNDER SECTION 62 & 64 OF

THE ELECTRICITY ACT, 2003

July 20, 2022

TABLE OF CONTENTS

LIST OF TABLES

Before

UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

Petition No. 1797 / 2021

IN THE MATTER OF:

TRUING UP FOR FY 2020-21, ANNUAL PERFORMANCE REVIEW (APR) FOR FY 2021-22 AND APPROVAL OF AGGREGATE REVENUE REQUIREMENT AND TARIFF FOR FY 2022-23

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 April 21, 2022 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, 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, 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 Tariffs 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 upload the approved Tariff / Rate Schedule on its internet website.

The tariff so published shall be in force after seven days from the date of such publication of the 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 M/s Noida Power Company Limited (hereinafter referred to as 'Petitioner', 'Licensee' or 'NPCL') was granted a 30-year 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 notified the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution and Transmission) Regulations, 2019 (hereinafter referred to as "MYT Regulations 2019") applicable for determination of tariff from April 1, 2020 onwards up to FY 2024-25 [i.e., till March 31, 2025] unless extended by the Commission. These Regulations were finalized by the Commission on September 23, 2019 and were finally uploaded on the Commission's website on November 22, 2019, after gazette notification. These Regulations are applicable for the purpose of submission of Multi Year Tariff Petition for Business Plan, True-up, Annual Performance Review (APR), determination of Annual Revenue Requirement (ARR) and Tariff of all the distribution and transmission licensees within the State of Uttar Pradesh for the Control Period FY 2020-21 to FY 2024-25.

PROCEDURAL HISTORY

1.3 BUSINESS PLAN BY THE LICENSEE

1.3.1 The Commission, vide its Tariff Order dated November 26, 2020 approved the Business Plan for MYT Control Period (FY 2020-21, to FY 2024-25) for NPCL.

1.4 TRUE UP FOR FY 2018-19, ANNUAL PERFORMANCE REVIEW (APR) FOR FY 2019-20, AND AGGREGATE REVENUE REQUIREMENT (ARR) FOR FY 2020-21 FILED BY THE PETITIONER

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

1.5 TRUE UP FOR FY 2019-20, APRFOR FY 2020-21, AND ARRFOR FY 2021-22 FILED BY THE PETITIONER

1.5.1 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.

1.6 TRUE UP FOR FY 2020-21, APR FOR FY 2020-21 AND ARR FOR FY 2022-23 FILED BY THE PETITIONER

1.6.1 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.

1.6.2 The Regulation 4 of MYT Regulations, 2019 stipulates the timelines for filing of Business Plan, ARR / Tariff, APR & True-Up Petitions under these Regulations. 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

1.6.3 The Petitioner submitted its Petition in the matter of Truing Up for FY 2020-21, Annual Performance Review (APR) for FY 2021-22 and determination of ARR / Tariff for FY 2022-23 before the Commission, on November 26, 2021.

1.7 PRELIMINARY SCRUTINY OF THE PETITIONS

1.7.1 After the detailed scrutiny of the Petition by the Commission, a deficiency note was issued to the Licensee vide letter No. UPERC/Secy/D(Tariff)/2021-1365 dated December 31, 2021, directing it to provide the required information within 10 days from the date of issuance of the Deficiency Note.

1.7.2 The Technical Validation Session (TVS) was conducted on February 11, 2022 through VC, 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 14, 2022.

1.7.3 The Commission also reiterated in the Admittance Order dated April 21, 2022 (Annexure-1), that the Licensee has not proposed any revision in Tariff and requested the Commission to continue with existing Tariff. The Commission directed the Licensee to submit the pending responses immediately and also directed to 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.

1.7.4 Subsequently, several other data deficiencies were sent to the Licensee vide various correspondences and the Licensee replied to the same via emails / letters. Further, the Licensee was also directed to submit its responses in hard copy also in affidavit.

1.7.5 Further, the Petitioner has informed that against the Commission’s Order dated August 26, 2021, for True-Up of FY 2019-20, APR of FY 2020-21 & ARR/Tariff for FY 2021-22 in the Petition No. 1648 of 2021, the Petitioner has filed Appeal before the Hon’ble APTEL.

1.7.6 Taking onto consideration the above deficiencies raised by the Commission, henceforth the Petitioner is directed to submit the following information along with each Tariff filing / Petition:

1. Provide the details of all the pending cases filed by NPCL against UPERC in various forums along with the status of the same.
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.
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 capitalized. Also provide the list of un-utilized land capitalized.
4. Provide copy of all the registries and usage details of all the land capitalized during the year.
5. Provide list of Open Access consumers (Long Term, Short Term, Medium Term) along with their consumption.
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.
7. Provide detailed breakup of CWIP claimed for the year along with the Petition.
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.
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.
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.

11. The Petitioner is directed to ensure that the actual Power Purchased (MU) ex-bus & at energy delivered 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.
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.
14. Submit the PPAs, Commission's approval and bills of each source from which power is procured, along with the True-up/ARR petition.
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.
16. Provide the daily load curves and monthly load curves for last year along with the corresponding N2 region demand curves of exchange.

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

1.8.1 The Commission, vide its Admittance Order dated, April 21, 2022, (annexed as Annexure – III) directed the Petitioner to publish Public Notice(s) consisting of the summary and highlights of the proposed ARR and Tariff for FY 2022-23, APR for FY 2021-22 and True-Up for FY 2020-21 in at least two (2) English and two (2) Hindi daily newspapers having wide circulation in its license 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(s), Petitions filed before the Commission along with all regulatory filings, information, particulars and related documents.

1.8.2 The Commission also directed that the Public Notice(s) should also contain the details of ARR, proposed Tariff, True-Up, details of actual and approved Distribution Loss for FY 2020-21, FY 2021-22 along with proposed losses for FY 2022-23, Power Purchase Cost, Average Cost of supply, Average retail Tariff from each category / subcategory wise consumers, wheeling charges, Open Access related charges etc., and such other matters if any, as directed by the Commission.

1.9 PUBLICITY OF THE LICENSEE FILING

1.9.1 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.

1.9.2 This information appeared in Hindi Newspapers (Dainik Jagran, Navbharat Times) and English Newspapers (The Statesman, Times of India) on April 26, 2022.

1.10 STATE ADVISORY COMMITTEE MEETING

1.10.1 The State Advisory Committee (SAC) meeting was also conducted on June 27, 2022 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 Licensee's supply area to express their views and to also obtain feedback from them, virtual public hearing through Video Conference was held by the Commission on June 24, 2022. The Public Notice for the same was published in the following newspapers:

S. No	Date	Hearing in the matter of
1	June 21, 2022	PVVNL, DVVNL, KESCo
2	June 22, 2022	MVVNL, PuVVNL
3	June 24, 2022	NPCL, UPPTCL

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 (annexed as Annexure –IV of this Order) for Public hearing dated June 21, 2022, June 22, 2022 and June 24, 2022 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	June 02, 2022
The Times of India (English) Lucknow Edition	June 02, 2022
Dainik Jagran (Hindi) UP Edition	June 02, 2022
Hindustan Times (English) Delhi Edition	June 02, 2022
Dainik Jagran (Hindi) Delhi Edition	June 02, 2022

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 June 27, 2022 in which Tariff related issues were discussed and inputs were sought from members of the Committee. The same have also been taken into consideration while determining and finalising 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 Licensee for its comments / response. The Commission considers these submissions of the consumers and the response of the Licensees before it embarks upon the exercise of determining the final True-up / APR / ARR / Tariff.

2.1.6 Besides this, the Commission, while disposing the True-up / APR / ARR / Tariff filed by the Licensee, has also taken into consideration the oral and written views / comments / suggestions / objections / representations received from various stakeholders during the public hearings through video conferencing 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 Commission has taken note of the various views/ comments / suggestions / objections / representations made by the stakeholders.

2.2.2 The Commission has attempted to capture the views/ comments / suggestions / observations in this section. However, in case any view/ comment / suggestion / observation is not specifically elaborated, it does not mean that the same has not been taken into consideration. The Commission has considered all the issues raised by the stakeholders and Petitioner response on these issues while carrying out the detailed analysis of the True Up for FY 2020-21, APR for FY 2021-22 and ARR/ Tariff for FY 2022-23.

2.2.3 The list of the persons who have submitted their views / comments / suggestions / objections / representations, is appended to this Tariff Order. The major issues raised therein, the replies given by the Petitioner and the views of the Commission have been summarized as detailed below:

LICENSE PERIOD

A. Comments / Suggestions of the Public

2.2.4 Shri Avadhesh Kumar Verma, Chairman, M/s U.P. Rajya Vidyut Upbhokta Parishad submitted that the license of NPCL is going to expire on August 30, 2023 and the Commission has to constitute a panel who would carry out high level investigation in all parameters and prepare inventory of all assets.

B. Petitioner's Response

2.2.5 As regards to the objection of Shri Avadhesh Kumar Verma, the Petitioner submitted that the contents of the same are of no relevance to the captioned Petition. The Petitioner submitted that it has filed the captioned Petition No. 1797 of 2021 for True up of FY 2020-21, APR of FY 2021-22 and ARR & Tariff for FY 2022-23 before the Commission. The Petitioner submitted that the contents of the corresponding paragraph have no bearing upon the captioned Petition and therefore any reliance placed upon the same is misplaced. Aggrieved with the findings of the Commission in relation to the term/tenure of the Petitioner's License, in its Orders dated November 26, 2020, December 04, 2020 and August 26, 2021, the Petitioner has filed Appeal Nos. 72/2021, 98/2021 and 343/2021, before the Hon'ble APTEL and the issue pertaining to the term/tenure of the Petitioner's License is sub judice.

C. Commission's View

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

DISTRIBUTION LOSS

A. Comments / Suggestions of the Public

2.2.7 Shri Avadhesh Kumar Verma, Chairman, M/s U.P. Rajya Vidyut Upbhokta Parishad submitted that proposed purchase of electricity is by considering higher distribution loss and such higher losses are not allowable. The distribution loss has to be considered as 6% for NPCL.

B. Petitioner's Response

2.2.8 As regards to the objection of Shri Avadhesh Kumar Verma, the Petitioner submitted that every licensed area has unique issues and challenges with respect to T&D losses and realization of bills. Even, within the same licensed area, there is a likelihood of huge divergence in T&D losses and realization of bills etc. There are certain areas/pockets where Aggregate Technical & Commercial (AT&C) losses range from 50% and above, whereas, in some other areas / pockets, such AT&C

losses are around 6% or so. The Petitioner has one hundred and eighteen (118) villages fully electrified and in many of them, the AT&C losses are higher than 50% and it has been a daunting task to provide eighteen (18) hours of supply as well contain AT&C losses within the regulatory norms prescribed by the Commission. Therefore, the AT&C losses are approved for the entire licensed area as a whole and not on sub-area or voltage basis. Therefore, the submissions of the stakeholder are misleading and devoid of merit.

C. Commission's View

2.2.9 The Commission has taken note of the objections/suggestions made by the stakeholder and the Petitioner's response. The Commission has considered the distribution loss of NPCL the same as approved in the Business Plan Order dated November 26, 2020.

OPERATION AND MAINTENANCE (O&M) EXPENSES

A. Comments / Suggestions of the Public

2.2.10 Shri Avadhesh Kumar Verma, Chairman, M/s U.P. Rajya Vidyut Upbhokta Parishad submitted from the balance sheet the company, it has been observed that the Managing Director of NPCL was awarded the salary of Rs. 6.5 Crore per year i.e., 55 lakhs per month at the expense of the consumers.

B. Petitioner's Response

2.2.11 As regards to the objection of Shri Avadhesh Kumar Verma, the Petitioner submitted that the remuneration of the Key Managerial Personnel (KMP) and other senior management officials, is strictly in accordance with the policy and provisions of the Companies Act, 2013 and with due approval of the Board and Shareholders of the Petitioner. On various occasions, the Petitioner has demonstrated that its O&M expenses comprising of salaries, repair and maintenance expenses, administration and general expenses, are market-aligned and in fact, the most competitive not only with State Discoms but also with other leading private distribution companies across the country.

C. Commission's View

2.2.12 The Commission has taken note of the objections/suggestions made by the stakeholder and the Petitioner's response. The Commission has approved the O&M expenses for FY 2020-21 and FY 2022-23 in accordance with the provisions of the MYT Regulations, 2019 as discussed in the subsequent chapters of the Order.

CAPITAL EXPENDITURE

A. Comments / Suggestions of the Public

2.2.13 Shri Avadhesh Kumar Verma, Chairman, M/s U.P. Rajya Vidyut Upbhokta Parishad submitted that the capital expenditure of NPCL is not allowable as in one hand GNIDA asset of value Rs. 135 Crore has been transferred to NPCL and on the other increasing the capital expenditure of NPCL is not prudent. Further, the proposal of purchase of vehicles is not allowable.

B. Petitioner's Response

2.2.14 As regards to the objection of Shri Avadhesh Kumar Verma, the Petitioner submitted that it has provided a detailed explanation / justification regarding distribution losses, power purchase and capital expenditure, in Chapters 3, 4, 6 and 7 of Appendix III, IV and V of the captioned Petition.

2.2.15 The Petitioner further, submitted that the vehicles are essential for efficiency in providing services to the consumers in its licensed area that is spread over 335 Sq. km. The vehicles are purchased after detailed evaluation of the requirements and as per the policy of the Petitioner. 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 Petitioner, in the most economical and efficient manner, to ensure compliance with its universal supply obligation under Section 43 of the Electricity Act, 2003.

2.2.16 The Petitioner is required to provide vehicles to its officers/ staff for loss control drives, field duties (including visiting Substations, transporting heavy materials), shift-based duties in call center, 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 night time. It is evident that no power distribution utility can work without vehicles which are as basic and necessary as furniture, office equipment such as computers, printers etc. In this regard, it is noteworthy that various regulatory forums, including, APTEL, have time and again reiterated that any legitimate O&M cost/expenditure incurred by a distribution utility/licensee towards dispensation of its function of distribution of electricity, ought to be allowed, subject to prudence check by the Appropriate Commission. (Refer Paras 12, 17 and 18 in DPSC Limited vs. WBERC (2014 SCC Online APTEL 77)].

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. The Commission had detailed its analysis on the capital expenditure claimed by the Petitioner in the subsequent chapters of the Order.

TARIFF

A. Comments / Suggestions of the Public

2.2.18 Shri Avadhesh Kumar Verma, Chairman, M/s U.P. Rajya Vidyut Upbhokta Parishad submitted that the Average Billing Rate (ABR) of NPCL is high whereas while the power purchase cost is low and in such situation the electricity tariffs have to be reduced. However, the tariff reduction has not taken place.

2.2.19 Further, he submitted that ABR and ACoS for FY 2019-20 are Rs. 8.17/unit and Rs. 6.12/unit respectively thereby the ABR is higher than ACoS by Rs. 2.05/unit but the benefits were passed on to the consumers in the form of reduced tariff on similar lines of regulatory surcharge of 8% levied previous year. The ABR and ACoS for FY 2020-21 are Rs. 8.34/unit and Rs. 7.39/unit respectively thereby the ABR is higher than ACoS by Rs. 0.95/unit. The ABR and ACoS for FY 2022-23 are Rs. 8.16/unit and

Rs. 8.05/unit respectively thereby the ABR is higher than ACoS by Rs. 0.11/unit. If a transparent enquiry is carried out in all previous financial parameters under regulatory process, then significant surplus amount will arise and NPCL has to balance the surplus by providing electricity supply free of cost for 1 year to all its consumer.

2.2.20 He also submitted that the electricity tariffs of NPCL have been determined in line with the State Discoms which are continuously operating in higher losses. The electricity tariffs of NPCL have to be reduced and regulatory benefits have to be passed on to its consumers.

B. Petitioner's Response

2.2.21 As regards to the objection of Shri Avadhesh Kumar Verma, the Petitioner submitted that it has filed the instant Petition for True up FY 2020-21, APR for FY 2021-22 and ARR & Tariff for FY 2022-23 followed by detailed replies on the deficiency notes issued by the Commission. The captioned Petition contains detailed submission on the cost of supply and revenue of the Petitioner alongwith Audited Annual Accounts for FY 2020-21. Further, as was done for the earlier years, in line with the directions of Commission, the financial audit by a reputed Chartered Accountant Firm has been done. The Petitioner requested the Commission to determine the ARR/Tariff for FY 2022-23 in accordance with the applicable provisions of the Electricity Act, 2003 read with the MYT Regulations, 2019.

C. Commission's View

2.2.22 The Commission has taken note of the objections/suggestions made by the stakeholder and the Petitioner's response. The Commission has discussed in detail the analysis carried out in True up FY 2020-21, APR for FY 2021-22 and ARR & Tariff for FY 2022-23 in the subsequent chapters of the Order.

CROSS SUBSIDY SURCHARGE (CSS)

A. Comments / Suggestions of the Public

2.2.23 Ms Rashi Singh, CEEW during the public hearing submitted that if ABR is more than ACoS, then levy of CSS does not arise.

B. Petitioner's Response

2.2.24 The Petitioner has not submitted any response.

C. Commission's View

2.2.25 The Commission has determined the CSS for FY 2022-23 in accordance with the provisions of the MYT Regulations, 2019 as detailed in subsequent Chapter of the Order.

MISCELLANEOUS

A. Comments / Suggestions of the Public

2.2.26 Shri Rehman, Indian Industrial Association (Greater Noida), and Shri Pramod Gupta, IAA, 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 to be taken up for uninterrupted power supply:

- Underground cabling for uninterrupted power supply even during windy climate.
- Separate RMU for each industry so that if there is fault in single consumer entire block power supply will not get disrupted.
- Supply has to be provided through express feeder.
- More than one (1) distribution licensee has to be permitted to supply power.

B. Petitioner's Response

2.2.27 The Petitioner submitted during the public hearing that

- Underground cabling is not financially viable owing to high capex.
- Separate RMU for each industry is not financially viable owing to large number of industrial consumers ranging from 60 kW to 70 kW.
- The stakeholders are being provided supply through express feeders.

- Further, each consumer cannot be provided supply through separate feeder as it leads to multiple LILO.

C. Commission's Analysis

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

3 INDEPENDENT AUDIT FOR FY 2020-21

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)/2021-965 dated October 27, 2021 appointed an independent auditor M/s. V R Associates Chartered Accountants (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 July 15, 2022.

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. No. of Consumer Variance

During the course of audit, the Auditor analysed that the variances for Category wise number of consumers with Projections of FY 2020-21 and with Actual of FY 2020-21 which are as follows. It is observed that Tariff Order for FY 2020-21 do not contain any computation of projected number of consumers.

Sl. No.	Category	Approved no. of consumers for FY 2020-21	Actual no. of consumers for FY 2020-21	Variance (Actual v/s Projected)	Variation (Actual v/s Projected)	Variance (Actual v/s Approved)	Variation (Actual v/s Approved)
		(No.)	(No.)	(No.)	(%)	(No.)	(%)
1	LMV-1: Domestic Light, Fan & Power	96886	95855	-6330	-6.19%	-1031	-1.06%
2	LMV-2: Non Domestic Light, Fan & Power	3373	3336	-248	-6.92%	-37	-1.10%
3	LMV-3: Public Lamps	295	342	80	30.53%	47	15.93%
4	LMV-4: Institutions	521	520	-1	-0.19%	-1	-0.19%
5	LMV-5: Private Tube Wells	1239	1249	59	4.96%	10	0.81%
6	LMV 6: Small and Medium Power	3465	3324	-141	-4.07%	-141	-4.07%
7	LMV-7: Public Water Works	226	246	29	13.36%	20	8.85%
8	LMV-8: STW and Pumped Canals	10	8	-2	-20.00%	-2	-20.00%
9	LMV-9: Temporary Supply	804	751	-53	-6.59%	-53	-6.59%
10	LMV-11: Electric Vehicle Charging	89	0	-89	-100.00%	-89	-100.00%
11	HV-1: Non Industrial Bulk Power	221	218	-3	-1.36%	-3	-1.36%
12	HV-2: Large and Heavy Power	863	858	16	1.90%	-5	-0.58%
15	**Total**	**107,992**	**106,707**	**-6683**	-	**-1285**	-

It is observed that that in case LMV-1, LMV-2, LMV-4, LMV-6, LMV-8, LMV-9, LMV-10, LMV -11 & LMV-12, there is variation between approved and actual number of consumers i.e. 1.06%, 1.10%, 0.19%, 4.07%, 20%, 6.59%, 100%, 1.36% & 0.58% respectively and in case of LMV-3, LMV-5 & LMV-7 there is variation (Under estimated/ over performed) of 15.93%, 0.81% & 8.85% respectively.

It is observed that total number of consumers in FY 2020-21 were 1,06,707 against the approved value of 1,07,992, which is 1.19% below the approved number of consumers.

2. Connected Load Variance

The Auditor analysed that the load variance for a comparison between actual connected load and approve connected load during FY 2020-21.

Sl. No.	Category	FY 2020-21			
		Approved Connected Load	Actual Connected Load	Variance	Variance
		(MW)	(MW)	(MW)	(%)
1	LMV-1: Domestic Light, Fan & Power	446.09	449.49	-3.40	-0.76%
2	LMV-2: Non Domestic Light, Fan & Power	29.24	28.21	1.03	3.53%
3	LMV-3: Public Lamps	10.59	10.93	-0.34	-3.16%
4	LMV-4: Institutions	5.95	6.83	-0.88	-14.82%

Sl. No.	**Category**	**FY 2020-21**			
		Approved Connected Load	**Actual Connected Load**	**Variance**	**Variance**
		(MW)	**(MW)**	**(MW)**	**(%)**
5	LMV-5: Private Tube Wells	5.95	6.16	-0.21	-3.51%
6	LMV 6: Small and Medium Power	80.07	76.56	3.51	4.38%
7	LMV-7: Public Water Works	8.62	8.45	0.17	2.03%
8	LMV-8: STW and Pumped Canals	0.13	0.10	0.03	24.62%
9	LMV-9: Temporary Supply	23.16	19.72	3.44	14.84%
10	LMV-11: Electric Vehicle Charging	8.23	0.00	8.23	100.00%
11	HV-1: Non Industrial Bulk Power	130.63	116.17	14.46	11.07%
12	HV-2: Large and Heavy Power	431.75	423.96	7.79	1.80%
	Total	**1,180.41**	**1,146.58**	**33.83**	

It is observed that in case of LMV-8, LMV -9 & HV-1 approved loads are 24.62%, 14.84 % & 11.07% higher than the actual load respectively.

3. Energy Sales

The Auditor observed that NPCL raises the Energy Sales Invoices on the basis of rates approved by the UPERC vide order dated September 03, 2019 made effective from September 12, 2019. The company has hired the services of M/s Imperial Electric Company (IEC) for the purpose of meter reading of Urban Domestic customers. For meter reading in rural areas the company appoints Village Contact Persons (VCP). The company also uses the application for meter reading through window based tablets being used for meter readings with onsite observations as well as capture photographs of meter readings. Further the company has divided customer's area-wise for taking meter readings and accordingly the billing cycle runs. The billing for other than domestic customers is atomized and reading is taken online by the system for which bills are raised by the ERP software SAP.

1. Unmetered Consumers

It is observed that the projections for the year 2020-21 was made by the company and has not considered any unmetered consumers. Whereas as per the details produced before the Auditor by NPCL, it has converted 96 unmetered connections to metered during the year. However, the company is still having 2803 unmetered consumers in LMV – 1 & LMV – 5 categories and which is almost 2.62% of total consumers.

(i) Unmetered Consumers- From the table, it can be observed that NPCL has converted only 67 unmetered consumers to metered consumers in FY 2020-21 whereas it has converted 218 unmetered consumers to metered consumers in FY 2019-20. Conversion rate has come down from 8.99% to 3.03 % in comparison to previous year. However, there are still 2141 unmetered consumers in the **LMV-1 category**.

(ii) Similarly, it can also be seen that NPCL has converted only 29 unmetered consumers to metered consumers in FY 2020-21 whereas it has converted only 15 unmetered consumers to metered consumers in FY 2019-20. Conversion rate has increased from 2.12 % to 4.20 % in comparison to previous year but still 662 unmetered consumers in the **LMV-5 category.**

(iii) It is also very clear from the table that the conversion ratio in comparison of the previous year has come down in case of LMV-1, whereas it increases in case of LMV-5 as compared to previous year.

S. No.	Particulars	2020-21	2019-20	2018-19	Between 18-19 to 19-20		Between 19-20 to 20-21	
		Unmetered Consumers	Unmetered Consumers	Unmetered Consumers	Converted M to UnM	Converted M to UnM	Converted M to UnM	Converted M to UnM
		No.	No.	No.	No.	%	No.	%
1	Domestic (LMV-1)							
	Load upto 2 kW	2,141	2,208	2,426	218	8.99	67	3.03
2	Private Tube Wells (LMV-5)	662	691	706	15	2.12	29	4.20
	Total	2803	2899	3132				

Section 55 (Use, etc., of meters) of Electricity Act, 2003 states that:

Quote

(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.*

Unquote

It is observed that as per the above section “installation of meters” is compulsory in case of every consumer. So as per the table there is still unmetered consumer (LMV-1 & LMV-5), which shows the non-compliance of the above mentioned section by Distribution Licensee (NPCL).

Further, as per section 55(3) of Electricity Supply Act, 2003, 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.

The Auditor suggested to NPCL, to take initiatives for converting unmetered consumer into metered consumer or connections and this will help the company to control and reduce the distribution losses.

4. Energy Sales Variance (MU)

The Auditor analyzed that the Energy Sales (MU) variance for a comparison between approved Energy Sales (MU) and actual Energy Sales (MU) during FY 2020-21 as follows.

Sl. No.	Category	Approved Energy Sales FY 2020-21 (MU)	Actual Energy Sales FY 2020-21 (MU)	Variance	% Variance
1	LMV-1: Domestic Light, Fan & Power	636.51	617.44	19.06	3.09%
2	LMV-2: Non-Domestic Light & Fan & Power	33.57	33.78	(0.21)	-0.61%
3	LMV-3: Public Lamps	33.13	31.06	2.08	6.69%
4	LMV-4: Institutions	13.91	10.37	3.54	34.08%
5	LMV-5: Private Tube Wells	22.94	19.47	3.47	17.84%
6	LMV 6: Small and Medium Power	78.67	82.46	(3.79)	-4.59%
7	LMV-7: Public Water Works	22.23	22.54	(0.32)	-1.40%
8	LMV-8: STW and Pumped Canals	0.18	0.09	0.10	115.78%
9	LMV-9: Temporary Supply	37.65	43.88	(6.23)	-14.20%
10	LMV-11: Electric Vehicle Charging	6.15	-	6.15	-
11	HV-1: Non Industrial Bulk Power	218.52	164.77	53.75	32.62%
12	HV-2: Large and Heavy Power	899.50	986.19	(86.69)	-8.79%
Total		**2,002.96**	**2,012.05**	**(9.09)**	**0.45%**

It is observed that number of units sold (MU) is higher than by 0.45% as compared to approved units.

5. Revenue Variance

The Auditor analyzed that the Revenue Variance for a comparison between approved Revenue and actual Revenue for FY 2020-21 and between actual Revenue for FY 2020-21 as follows.

Sl. No.	Category	Approved for FY 2020-21 (Rs. Crore)	Actual for FY 2020-21 (Rs. Crore)	Variance in Revenue (Rs. Crore)	% Variance
1	LMV-1: Domestic Light, Fan & Power	443.16	409.11	34.05	8.32
2	LMV-2: Non Domestic Light & Fan & Power	38.13	39.30	(1.16)	(2.96)
3	LMV-3: Public Lamps	33.36	28.72	4.64	16.15
4	LMV-4: Institutions	14.30	9.24	5.06	54.76
5	LMV-5: Private Tube Wells	5.40	4.38	1.02	23.36
6	LMV 6: Small and Medium Power	80.62	88.02	(7.40)	(8.41)
7	LMV-7: Public Water Works	21.89	24.88	(2.99)	(12.03)
8	LMV-8: STW and Pumped Canals	0.21	0.21	(0.00)	(1.16)
9	LMV-9: Temporary Supply	42.02	56.75	(14.72)	(25.95)
10	LMV-11:Electric Vehicle Charging	4.48		4.48	
11	HV-1: Non Industrial Bulk Power	228.37	191.32	37.05	19.37
12	HV-2: Large and Heavy Power	727.13	825.26	(98.13)	(11.89)
12	**Subtotal**	**1,639.07**	**1,677.18**	**(38.11)**	**2.32%**

It is ascertained that Energy Sales (in Crores) has increased by 2.32% as compared to approved energy sales.

6. Average Realization Variance

The Auditor analyzed that the Average Realization Variance for a comparison between approved Average Realization and actual Average Realization for FY 2020-21 as follows.

Sl. No.	Category	Approved for FY 2020-21 (Rs./kWh)	Actual for FY 2020-21 (Rs./kWh)	Variance (Actual v/s Projected) (Rs./kWh)	Variation (Actual v/s Projected) (in %)	Variance (Actual v/s Approved) (Rs./kWh)	Variation (Actual v/s Approved) (in %)
1	LMV-1: Domestic Light, Fan & Power	6.96	6.63	-0.44	-6.28%	0.34	5.08%
2	LMV-2: Non Domestic Light & Fan & Power	11.36	11.63	-0.52	-4.25%	(0.27)	-2.36%
3	LMV-3: Public Lamps	10.07	9.25	-0.09	-0.98%	0.82	8.87%
4	LMV-4: Institutions	10.28	8.91	0.29	3.31%	1.37	15.42%
5	LMV-5: Private Tube Wells	2.35	2.25	0.24	11.87%	0.11	4.69%
6	LMV 6: Small and Medium Power	10.25	10.67	-0.45	-4.01%	(0.43)	-4.00%
7	LMV-7: Public Water Works	9.85	11.04	1.11	11.14%	(1.19)	-10.77%
8	LMV-8: STW and Pumped Canals	11.19	24.43	12.75	109.16%	(13.24)	-54.19%
9	LMV-9: Temporary Supply	11.16	12.93	0.13	1.03%	(1.77)	-13.69%
10	LMV-11:Electric Vehicle Charging	7.28	-	7.31	100.00%	7.28	
11	HV-1: Non Industrial Bulk Power	10.45	11.61	0.88	8.21%	(1.16)	-9.99%
12	HV-2: Large and Heavy Power	8.08	8.37	-0.18	-2.13%	(0.28)	-3.40%
	Total	**8.18**	**8.34**	-	-	**(8.43)**	-

It is observed that overall rate was higher that approved rates by 1.96%. For, LMV-8 actual rates are higher by 118.30% as compared to approved rates, whereas for LMV - 1, LMV- 3, LMV - 4 & LMV – 5. Similarly, in case of LMV-2, LMV-6, LMV-7, LMV-9, HV-1 & HV-2 actual rates were 2.41%, 4.17%, 12.08%, 15.86%, 11.1% and 3.52 % higher than the approved rate respectively.

Comparison of actual and approved details related to Energy Sales figures for FY 2020-21

FY 2020-21	No of Consumers	Energy Sales (Crore)	Number of Units sold (MU)	ABR
Approved	107992	1639.07	2002.96	8.18
Actuals	106707	1677.18	2012.05	8.34
Variation	1285	38.11	9.09	0.16
Variation (in %)	1.19	2.32	0.45	1.96

The observations of the Auditor are as under:

(i) It is observed that total average realization from the consumers was Rs. 8.34/KWh against the approved average rate Rs. 8.18/KWh,

(ii) From the above table it is clear that total number of consumers in FY 2020-21 were 1,06,707 against the approved 1,07,992, which is 1.19% below the approved number of consumers.

(iii) Similarly, it can be ascertained that Energy Sales (in Crores) has increased by 2.32% as compared to approved energy sales.

(iv) Number of units sold (MU) is higher than by 0.45% as compared to approved units.

7. Power Factor in Consumers Bill

One of the consumer bill where Power Factor surcharge is 0.72, which is below 0.90.

Name of Consumer :	Aman Gupta (LMV-2)		Billing Month	20-Jul
Consumer No.	2000113806			
Previous Meter Reading	UOM	Current Meter Reading	UNIT	PF
36576.4	KWH	36592.6	16.2	0.72
33136.3	KWARH	33152.1	15.8	
50042.6	KVAH	50065.2	22.6	
0	KVA	9.8		

As per Rate Schedule for FY 2020-21,

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 connection of motive power load/inductive loads above 3 Kw, other than under LMV-1 and LMV-2 category, and / or of welding transformers above 1KVA shall be given, unless shunt capacitors having I.S.I specification of appropriate ratings are installed, as described in section H – “LIST OF POWER FACTOR APPARATUS” of this Rate Schedule.

iii) In respect of the consumer with or without TVM/TOD/Demand recording meters, excluding consumer under LMV-1 category up to contracted load of 10KW 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 consumer. 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.

It is suggested to the company to inspect the load and initiate the proceeding and follow the rules mentioned above

Statement showing revenue loss in case of Defective Meter Billing

The billing in case of defective meters to be done as per applicable provisions of Electricity Supply Code 2005, and its amendments from time to time.

a. The consumer is expected to intimate the licensee, as soon as he notices that meter has stopped/not recording.
b. If during periodic or other inspection, meter is found to be not recording by licensee, or a consumer makes a complaint in this regard, the licensee shall arrange to test the meter within 15 days
c. If the meter is actually found not recording it shall be replaced within 15 days of test.
d. The consumer shall be billed, for the period between the date of last reading and the date of replacement of the defective meters, on the basis of average consumption and average maximum demand of three billing cycle prior to the last reading. The provisional bills, if any issued, shall be accordingly adjusted
e. In case where the recorded consumption of past three billing cycles prior to the date meter become defective is either net available or partially available the consumption pattern as obtain from consumption of the new/repaired meter for three billing cycles shall be taken for estimation of consumption
f. While calculating the average consumption, due consideration of seasonality of load shall be made and in such cases consumption of previous year for same period shall be taken. Due cognizance to consumption during closure of industry due to shut down/maintenance of plant shall be given by licensee after careful verification of record, or by ascertaining of the consumption through check meters during such closure period.

Computation of Defective Meter Billing

Name of Consumer :	**Ramesh Chand**		**Billing Month**	**20-Jul**
Consumer No.	**2000132769**			
Date	**Current Year Previous 3 Billing Meter Reading**	**Date**	**Previous Year 3 Billing Meter Reading**	**Revenue Loss Units**
15-06-2020	1381	20-04-2019	657	
	327.5		1138	
17-03-2020	283.5	16-07-2019	575	
90 days	1992	87 days	2370	
Per Day Electricity Consumption	**22.13**	Per Day Electricity Consumption	**27.24**	
Bill 17 days	**376.27**		**463.10**	**-86.84**

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Computation of Defective Meter Billing

Name of Consumer :	**Flora Green Buildtech pvt Ltd.**	**Billing Month**	**20-Jul**
Consumer No.	**2000110587**		

Date	Current Year Previous 3 Billing Meter Reading	Date	Previous Year 3 Billing Meter Reading	Revenue Loss Units
27-03-2020	519.35	25-03-2019	349.8	
	116.11		495.6	
26-06-2020	447.9	26-06-2019	728.5	
91 days	1083.36	93 days	1573.9	
Per Day Electricity Consumption	**11.91**	Per Day Electricity Consumption	**16.92**	
Bill 17 days	**285.72**		**406.17**	**-120.45**

In our opinion in the above cases point (f) shall be taken into consideration

8. Distribution Losses

Statement showing year-wise % variance between approved & actual distribution losses

Statement showing variation of distribution losses			
Year	**Approved**	**Actual**	**% Variance**
2014-15	8.00%	8.10%	-
2015-16	8.00%	8.04%	-
2016-17	8.00%	8.01%	-
2017-18	8.00%	7.99%	-
2018-19	8.00%	8.15%	0.16%
2019-20	8.00%	8.23%	0.08%
2020-21	7.92%	8.39%	0.16%

(i) From the above Table, it is observed that the distribution loss of the company for FY 2020-21 was approved at 7.92 % against which the actual distribution loss incurred was 8.39 %, which shows an increase of 5.93% in distribution loss as compared to approved losses.

(ii) It is very clear from the table shown above that the distribution losses were continuously increasing from 2018-19 (taking FY 2017-18 as base period).

(iii) The distribution losses have increased from FY 2018-19, FY 2019-20 and FY 2020-21 by 0.16%, 0.08% and 0.16% respectively, showing a pattern of distribution losses

(iv) But still It is very difficult to understand that despite of huge amount of CAPEX & great efforts to achieve, robust, tailor-made initiatives by NPCL for control the distribution losses, why distribution losses were increasing or following a pattern or stick at or around 8%.

(v) So it is suggested that company should work more on reasons for occurrence of these Technical & Non-Technical losses such as electrical network, harmonics distortion, meter reading, non-collection of dues etc.

Statement showing variation of distribution losses								
Year	**Approved**	**Actual**	**Power Purchased**	**Distribution Loss as per Approved**	**Distribution Loss as per Actual**	**Extra Units Lost**	**Total Purchase Cost (in Rs. Cr.)**	**Lost Cost (in Rs. Cr)**
2019-20	8.00%	8.23%	2,267.28	181.38	186.60	5.21	1307.28	3.007
2020-21	7.92%	8.39%	2196.36	173.95	184.27	10.32	1157.13	5.436

During analysis Auditor observed that distribution loss of the company for the period under audit was approved at 7.92% as against the actual distribution loss incurred was 8.39%, resulting into additional purchase of 10.32 units which an amounting to Rs. 5.439 Crore.

Statement showing Distribution Losses in LT & HT System

Distribution Losses in LT and HT system							
S.No.	**Particulars**	**Past Year Data**				**Variance (MU)**	**Variance in %**
		FY 17-18	**FY 18-19**	**FY 19-20**	**2020-21**		
		Audited	**Audited**	**Audited**	**Audited**		
A	**System Losses At 33 KV & Above**						
	Energy received into the system	1,812.47	2,014.17	2,267.28	2,196.36		
	Energy sold at this voltage level	819.57	944.10	1037.87	964.90		
	Energy Lost	20.40	23.54	25.90	24.12		
	Energy transmitted to the next (lower) voltage level	972.50	1,046.53	1,203.51	1,207.34		
	Total Energy Sold (at different voltage levels)	**1,812.47**	**2,014.17**	**2,267.28**	**2,196.36**		
	Energy Lost	20.40	23.54	25.90	24.12		

Distribution Losses in LT and HT system

S.No.	Particulars	Past Year Data				Variance (MU)	Variance in %
		FY 17-18	FY 18-19	FY 19-20	2020-21		
		Audited	Audited	Audited	Audited		
	Total Loss in the system (4/1)*100%	**2.43**	**2.43**	**2.43**	**2.44**	**0.004**	**0.17**
B	**Losses At 11 KV**						
	Energy received into the system	972.50	1,046.53	1,203.51	1,207.34		
	Energy sold at this voltage level	441.52	477.29	568.47	588.37		
	Energy Lost	28.73	31.85	37.42	37.91		
	Energy transmitted to the next (lower) voltage level	**502.25**	**537.39**	**597.62**	**581.06**		
	Energy Lost	28.73	31.85	37.42	37.91		
	Total Loss in the system (4/1)*100%	**6.11**	**6.26**	**6.18**	**6.05**	**(0.123)**	**(1.99)**
C	**LT System Losses**						
	Energy received into the system	502.25	537.39	597.62	581.06		
	Energy sold at this voltage level	406.51	428.68	474.31	458.78		
	Energy Lost	95.74	108.71	123.31	122.28		
	Total Loss in the system (3/1)*100%	**19.06**	**20.23**	**20.63**	**21.04**	**0.411**	**1.99**
D	**Overall Losses**						
	Energy In (A1)	1,812.47	2,014.17	2,267.28	2,196.36		
	Energy Out (A2+B2+C2+D2))	1,667.60	1,850.07	2,080.65	2,012.05		
	Total Distribution Loss ((1-2)/1)*100%	7.99%	8.15%	8.23%	8.39%	**0.0016**	**1.945**

(i) From the above table it is evident that losses at 33 KV has increased by 0.17% and by 1.99% in case of LT System as compare to the previous year and in case of 11 kV distribution losses have come down by 1.99%.

(ii) Apart from the FY 2020-21, losses in the past three years were remaining constant in case of line 33 kV & above.

(iii) It is evident from the above table that losses are continuously increasing year by year in case of LT lines

Statement showing % share of different potential of electricity

S. No	Particulars	'Energy received into the system	Energy sold at this voltage level	% Share
1	33 KV & Above	2,196.36	989.02	45.03
2	11 KV	2,196.36	626.28	28.51
3	LT	2,196.36	581.06	26.46
			2,196.36	

It is observed from the above two tables, that percentage share in case of 33 kV and above is almost 45.03% and losses were just 0.17%, similarly in case of 11kV, % share is 28.51% and corresponding savings in loss is 1.99% whereas it is 26.46% in case of LT and corresponding loss is 1.99%.

9. Power Purchase

Power is purchased by NPCL under different types of contracts as below:

1. Long term Basis
2. Short Term Competitive Bid
3. Scheduled on day ahead basis
4. Renewable Sources
5. Peak Load Rate Benchmark with Power Exchange

The average rate of Rs. 5.79/ KWh for power purchase was approved by the Commission in the True Up for FY 2019-20, which includes long term purchase, purchase from traders, purchase from RE, transmission expenses and power purchase expenses of previous years.

Total Power Purchase

Long Term Power Purchase

(i) NPCL has purchased the total power at an average per unit cost of Rs. 5.27/kWh against the average per unit approved price of Rs. 4.42/kWh.

(ii) From the table given below it is clear that NPCL has purchased 1300.69 MU (Ex-Bus) and 1208.69 MU (NPCL Bus) from M/s DIL (Long Term PPA) at Rs. 5.79 per unit.

(iii) It is pertinent to mention here that LTPPA dated September 26, 2014 with M/s Dhariwal Infrastructure Limited (DIL) for supply of 187 MW (Gross Contracted

Capacity) for the period of 25 years, had been approved by the Commission (order dated 15-01-2016 & 15-04-2016). The copy of such order along with LTPPA has been put before us during the period of audit for verification. We also sought the ledger balance confirmation from M/s DIL and reconcile the same from the books of accounts of NPCL.

Supplier's Name	**MU**	**MU Imported**	**Rate**	**Fixed Charges**	**Energy Charges**	**Amount**	**Transmission**	**Transmission**	**Total**	**Per Unit Cost**
	Exported	**at NPCL bus**	**(Rs. / Unit)**	**(in Rs. Crore)**	**(in Rs. Crore)**	**(in Rs. Crore)**	**Charges of PGCIL (in Rs. Crore)**	**Charges of UPPTCL (in Rs. Crore)**	**(in Rs. Crore)**	**Rs./ Unit**
Long Term Power										
Long Term Power from DIL	1,300.69	1,208.69	4.63	233.16	368.94	602.10	73.17	24.86	700.13	5.79
Addl. Coal (2020-21)					0.41	0.41	-	-	0.41	
Change in Law(2019-20)					3.66	3.66	-	-	3.66	
Change in Law (2020-21)					4.86	4.86	-	-	4.86	
Subtotal	**1,300.69**	**1,208.69**	**4.70**	**233.16**	**377.87**	**611.02**	**73.17**	**24.86**	709.06	**5.87**
Medium Term Power									-	
APPCPL- Govt. of AP	212.42	198.36	4.09	37.09	49.70	86.79	8.28	3.96	99.03	4.99
APPCPL	102.23	95.89	4.08	18.31	23.44	41.76	3.62	1.94	47.31	4.93
PTC - SKS Power	-	-	0.00	-	-	-	1.38	-	1.38	
Subtotal	**314.65**	**294.25**	**4.09**	**55.40**	**73.15**	**128.55**	**13.27**	**5.90**	147.72	**5.02**
Short Term Power									-	
APPCPL (DB Power)	88.97	84.09	4.53	-	40.30	40.30	0.29	0.10	40.69	4.84
Adani Enterprise	15.77	14.91	4.17	-	6.57	6.57	0.08	0.04	6.69	4.49
Power Purchase	492.38	461.16	3.21	-	157.98	157.98	5.81	10.56	174.35	3.78
Withdrawal from Power Banked in FY 20	1.22	1.16	0.04	-	0.00	0.00	0.03	0.02	0.06	0.54
Subtotal	**598.34**	**561.32**	**3.42**	**-**	**204.85**	**204.85**	**6.21**	**10.73**	221.79	**3.95**
Renewable Power									-	
Solar Power (GNIDA)	1.19	1.19	6.92	-	0.82	0.82	-	-	0.82	6.92
Solar Power (APPCPL)	0.35	0.35	5.54	-	0.19	0.19	-	-	0.19	5.54
Solar Power (GTAM)	13.37	12.46	3.43	-	4.59	4.59	0.07	0.31	4.97	3.99
Solar Power (Net Meter)	8.20	8.20	8.05	-	6.60	6.60	-	-	6.60	8.05
Wind Power (PTC)	28.71	27.70	3.46	-	9.93	9.93	-	0.55	10.48	3.78
Non-Solar (GTAM)	7.19	6.70	4.40	-	3.20	3.20	0.00	0.18	3.39	5.06
Hydro Power (Kreate)	70.97	66.92	3.80	-	26.95	26.95	3.43	1.44	31.82	4.76

Supplier's Name	MU	MU Imported	Rate	Fixed Charges	Energy Charges	Amount	Transmission	Transmission	Total	Per Unit Cost
	Exported	at NPCL bus	(Rs. / Unit)	(in Rs. Crore)	(in Rs. Crore)	(in Rs. Crore)	Charges of PGCIL (in Rs. Crore)	Charges of UPPTCL (in Rs. Crore)	(in Rs. Crore)	Rs./ Unit
Subtotal	**129.97**	**123.51**	**4.02**	**-**	**52.29**	**52.29**	**3.51**	**2.49**	58.28	**4.72**
Sub Total	**2,343.65**	**2,187.78**	**4.25**	**288.56**	**708.16**	**996.72**	**96.16**	**43.97**	**1,136.85**	**5.20**
UPPTCL True-up Arrear (17-18, 18-19)	-	-	-	-	-	-	**-**	14.07	14.07	
Other UPSLDC AF								0.12	0.12	
UI	8.67	8.58	6.91	-	5.99	5.99	0.06	0.03	6.08	7.09
Grand Total	**2,352.32**	**2,196.36**	**4.26**	**288.56**	**714.14**	**1,002.70**	**96.22**	**58.20**	**1,157.13**	**5.27**

UI - Unscheduled Interchange / Sale of Power
AF - Application Fees
PTC-SKS Power - (Additional claim)
Power Purchase - from Exchange

Short Term Power Purchase

(i) During audit, Auditor found that NPCL has purchased Medium Term Power 314.65 MU (294.25 MU at NPCL BUS) from APPCPL (Government of AP) at a rate of Rs. 4.09 per unit which amounted to Rs. 128.55 Crore (without transmission charges) and with transmission charges amounted to Rs. 147.72 Crore at the rate of Rs. 5.02 per unit.

(ii) The copy of such order along with MTPPA has been put before us during the period of audit for verification. We also sought the ledger balance confirmation from M/s DIL and reconcile the same from the books of accounts of NPCL.

Statement showing details of Energy Purchased & Energy Received from different sources and % of Loss of Energy

S.No	Power Purchased from	Energy Purchased	Energy Received	Loss of Energy	% Loss of Energy
		in Units	in Units	in Units	%
A.	**Long Term Purchase (PPA)**	**1,339.13**	**1,246.13**	**93.00**	**6.95%**
	Thermal Power (M/s DIL)	1,300.69	1,208.69	91.99	7.07%
	Solar Power (M/s GNIDA)	1.19	1.19	-	0.00%
	Solar Power (M/s APPCPL)	0.35	0.35	-	0.00%
	Solar Power (Net Metering)	8.20	8.20	-	0.00%
	Wind Power (M/s PTC)	28.71	27.70	1.01	3.52%
B.	**Medium Term Purchase (PPA)**	**314.65**	**294.25**	**20.40**	**6.48%**
	M/s APPCPL (Source- Govt. of AP)	212.42	198.36	14.06	6.62%
	M/s APPCPL (Source- Govt. of Nagaland)	102.23	95.89	6.34	6.20%
	M/s PTC (Source- SKS Power)	-	-	-	

S.No	Power Purchased from	Energy Purchased	Energy Received	Loss of Energy	% Loss of Energy
		in Units	in Units	in Units	%
C.	**Short Term Power**	**598.34**	**561.32**	**37.02**	**6.19%**
	APPCPL (Source-DB Power)	88.97	84.09	4.87	5.48%
	Adani Enterprise	15.77	14.91	0.86	5.47%
	Power Purchase from Exchange	492.38	461.16	31.21	6.34%
	Power Banking	1.22	1.16	0.07	5.45%
D.	**Short Term RE Power**	**91.53**	**86.08**	**5.45**	**5.95%**
	Non-Solar (Exchange-RE)	7.19	6.70	0.49	6.81%
	Solar Power (Exchange-RE)	13.37	12.46	0.91	6.82%
	Hydro Power (Kreate Energy)	70.97	66.92	4.05	5.70%
E.	**UPSLDC Application / Concurrence Fees**	**-**	**-**	**-**	**-**
	UPPTCL True-up Arrear	-	-	-	-
	UPSLDC Application / Concurrence Fees	-	-	-	0.00%
F.	**Energy as per CERC Regulations**	**2,343.65**	**2,187.78**	**155.87**	**6.65%**
G.	Less: UI Adjustment/Sale of Power	8.67	8.58	0.09	1.03%
H.	**Power Purchase Cost for the year**	**2,352.32**	**2,196.36**	**155.96**	**6.63%**
I.	UPPCL's BST Arrear	-	-	-	-
J.	**Total Power Purchase Cost**	**2,352.32**	**2,196.36**	**155.96**	**6.63%**

It is observed that for long term power purchase, there is a loss of 7.07% in case of M/s DIL and 3.52% in case of Wind power (M/s PTC). Similarly, for Medium Term Power Purchase energy loss is 6.62% in case of M/s APPCPL (Government of AP) and 6.20% in case of M/s APPCPL (Government of Nagaland). For short term power purchase average loss is 6.19% and 5.95% in case of short term RE power.

Variation between Approved and Actual per unit Cost (before & after Transmission Charges)

		As per NPCL					Approved as per UPERC		Variance		Variation in %	
Sl. No.	Month	Power Purchased	Total Cost before Tans. Charges	Per Unit Cost	Total Cost after Tans. Charges	Per Unit Cost	Per Unit Cost before Trans. Charges	Per Unit Cost After Trans. Charges	Per Unit Cost before Trans. Charges	Per Unit Cost After Trans. Charges	before Trans. Charges	after Trans. Charges
		MU	Rs. Crore	Rs./kWh	Rs. Crore	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh	%	%
1	Apr-20	88.07	50.45	5.73	59.88	6.80	3.70	4.42	(2.03)	(2.38)	(54.83)	(53.84)
2	May -20	142.61	67.79	4.75	78.64	5.51	3.70	4.42	(1.05)	(1.09)	(28.47)	(24.76)
3	Jun-20	202.19	96.45	4.77	109.95	5.44	3.70	4.42	(1.07)	(1.02)	(28.92)	(23.04)

		As per NPCL					Approved as per UPERC		Variance		Variation in %	
Sl. No.	**Month**	**Power Purchased**	**Total Cost before Tans. Charges**	**Per Unit Cost**	**Total Cost after Tans. Charges**	**Per Unit Cost**	**Per Unit Cost before Trans. Charges**	**Per Unit Cost After Trans. Charges**	**Per Unit Cost before Trans. Charges**	**Per Unit Cost After Trans. Charges**	**before Trans. Charges**	**after Trans. Charges**
		MU	**Rs. Crore**	**Rs./kWh**	**Rs. Crore**	**Rs./kWh**	**Rs./kWh**	**Rs./kWh**	**Rs./kWh**	**Rs./kWh**	**%**	**%**
4	Jul-20	233.42	102.36	4.39	118.42	5.07	3.70	4.42	(0.69)	(0.65)	(18.51)	(14.78)
5	Aug-20	229.55	100.94	4.40	115.09	5.01	3.70	4.42	(0.70)	(0.59)	(18.84)	(13.43)
6	Sep-20	244.93	110.21	4.50	125.82	5.14	3.70	4.42	(0.80)	(0.72)	(21.62)	(16.22)
7	Oct-20	198.48	82.26	4.14	94.16	4.74	3.70	4.42	(0.44)	(0.32)	(12.02)	(7.34)
8	Nov-20	148.66	68.14	4.58	77.28	5.20	3.70	4.42	(0.88)	(0.78)	(23.87)	(17.61)
9	Dec-20	169.48	72.78	4.29	83.39	4.92	3.70	4.42	(0.59)	(0.50)	(16.06)	(11.32)
10	Jan-21	185.98	79.15	4.26	89.36	4.81	3.70	4.42	(0.56)	(0.39)	(15.03)	(8.71)
11	Feb-21	164.43	75.13	4.57	84.60	5.15	3.70	4.42	(0.87)	(0.73)	(23.49)	(16.40)
12	Mar-21	188.55	97.05	5.15	106.45	5.65	3.70	4.42	(1.45)	(1.23)	(39.11)	(27.73)
	Total	2,196.36	1,002.70	4.57	1,143.05	5.20	3.70	4.42	(0.87)	(0.78)	(23.39)	(17.74)
	UPP TCL				14.07							
	GT	2,196.36	1,002.70	4.57	1,157.13	5.27	3.70	4.42	(0.87)	(0.85)	(23.39)	(19.19)

Note: COVID period from 23rd March to June 2020

(i) There is variation between the cost of power purchase and the cost approved by the Commission in every month.

(ii) In the month of April 2020, variation between per unit cost of power purchase and the cost approved by UPERC is highest i.e., Rs. 2.03 and Rs. 2.38, before and after transmission charges respectively.

(iii) The per unit cost of power purchase is higher than the approved rates by the Commission in every month.

(iv) The power purchase as approved by commission is 2175.23 MU for the FY 2020-21, whereas company has purchased 2196.36 MU, which is approximately 1% more than approved.

(v) The Auditor observed that the actual transmission charges for the year 2020-21 Is Rs 154.32 Crore.

Reconciliation of Power Purchase Cost (FY 2020-21)			
Sl. No.	**Particulars**	**Ref.**	**Rs. Crore**
1	**PPC as per Audited A/c**	**a**	**1,156.98**
2	Power Banking (being considered at Nil in ARR being barter transaction)	b	-0.64
3	Rebate on Additional Claim of M/s DIL (Already considered by Commission true up for FY 19-20)	c	0.79
4	**PPC as per True up Petition**	**d=a+b+c**	**1,157.13**

Renewal Power Purchase Obligation

Actual RPO for FY 2020-21				
Particulars	**Opening Unfulfilled Obligation**	**Obligation for the year**	**Obligation met during the year**	**Closing Unfulfilled Obligation**
Solar	44.29	51.53	51.21	44.62
Non-Solar	71.85	103.07	34.40	140.52
HPO	19.85	34.36	66.92	-12.71
Total	**135.99**	**188.96**	**152.52**	**172.42**

Approved RPO for FY 2020-21				
Particulars	**Opening Unfulfilled Obligation**	**Obligation for the year**	**Obligation met during the year**	**Closing Unfulfilled Obligation**
Solar	66.29	52.36	1.58	117.07
Non-Solar	80.46	104.71	30.46	154.71
HPO	18.73	34.90	-	53.63
Total	**165.49**	**191.97**	**32.04**	**325.42**

10. Audit of Capex

i) Land (Leasehold and Freehold)-

The Auditor has observed that there are total 59 numbers of lands (Freehold and leasehold both). As per the discussion held with the auditee it is the policy of NPCL to capitalize the land as and when it was purchased or acquired either as a leasehold or freehold. From the Table below, it is observed that out of the total 59 lands 16 lands were lying vacant / unused and which were taken into CAPEX, for such a capital expenditure which were not in use (unproductive unless until it become productive) should not be taken into CAPEX and burdened of the same should not be transferred to consumer, irrespective of the futuristic logic. And the impact of the same on other heads must be taken care-off accordingly.

The lands in question are acquired way-back in 2008, 2012, 2013 and so on and have been already approved by UPERC. The Cost has been taken in books following the accounting standards. In Regulatory Books, while passing the order, UERC has disallowed the cost which has already been allowed in earlier years. Hence, the company has filed an appeal and matter is sub-judice.

Asset No.	Asset Category	Asset Description	Quantity	Date of Capitalisation	Gross Block (Opening)	Status of Land
10000001	Leasehold Land	LEASEHOLD LAND ALPHA - 1 SUBSTATION	1,500	31/03/2004	2584687	In Use
10000002	Leasehold Land	LEASEHOLD LAND - UDHYOG KENDRA	1,483	31/03/2004	2551704	In Use
10000003	Leasehold Land	LAND FOR EPIP SUB/STN	2,105	30/11/2004	257730	In Use
10000004	Leasehold Land	LEASEHOLD LAND DELTA SUBSTATION	1,517	16/12/2006	2495010.99	In Use
10000005	Leasehold Land	COST OF LAND FOR 33/11KV ELECTRIC SUB/STN AT BUIL	1,472	16/12/2006	2661765.49	In Use
10000006	Leasehold Land	COST OF LAND FOR 33/11KV ELECTRIC SUB/STN AT SECTO	1,500	26/12/2006	2726956.99	In Use
10000007	Leasehold Land	COST OF LAND FOR KNOWLEDGE PARK-II G.NOIDA	1,500	08/01/2008	2844766	In Use
10000008	Leasehold Land	COST OF LAND FOR KNOWLEDGE PARK-III G.NOIDA	1,500	08/01/2008	2844696	In Use
10000009	Leasehold Land	COST OF LAND FOR ELECTRIC SUB/STN AT XU-I, GR NOID	2,400	25/03/2008	5867420	In Use
10000010	Leasehold Land	COST OF LAND FOR ELECTRIC SUB/STN AT ETA-I, GR NOI	2,424	25/03/2008	5693323	Unused/Vacant

Asset No.	Asset Category	Asset Description	Quantity	Date of Capitalisation	Gross Block (Opening)	Status of Land
10000011	Leasehold Land	COST OF LAND FOR ELECTRIC SUB/STN AT ECOTECH-II, G	2,400	25/03/2008	4835420	In Use
10000012	Leasehold Land	COST OF LAND FOR ELECTRIC SUB/STN AT PI-I, GR NOID	1,500	25/03/2008	2409420	Unused/Vacant
10000013	Leasehold Land	COST OF LAND FOR ELECTRIC SUB/STN AT CHI-IV, GR NO	2,208	25/03/2008	5187109.5	In Use
10000014	Leasehold Land	LAND FOR ELECTRIC SUB/STN AT PHI-II/III, GR NO	837	25/03/2008	2086671	Unused/Vacant
10000015	Leasehold Land	COST OF LAND FOR ELECTRIC SUB/STN AT GHARBARA, GR	35,000	25/03/2008	82003420	In Use
10000016	Leasehold Land	COST OF LAND FOR ELECTRIC SUB/STN AT OMEGA-II, GR	1,500	25/03/2008	3529670	In Use
10000017	Leasehold Land	COST OF LAND FOR ELECTRIC SUB/STN AT SIGMA-IV, GR	2,400	25/03/2008	5637920	In Use
10000018	Leasehold Land	COST OF LAND FOR ELECTRIC SUB/STN AT ZETA-I, GR NO	2,628	25/03/2008	6173417.5	In Use
10000019	Leasehold Land	COST OF LAND FOR ELECTRIC SUB/STN AT PI-II, GR NOI	1,547	25/03/2008	2484675	In Use
10000020	Leasehold Land	COST OF LAND FOR ELECTRIC SUB/STN AT BZP, GR NOIDA	2,488	25/03/2008	5021994	Unused/Vacant
10000021	Leasehold Land	COST OF LAND FOR ELECTRIC SUB/STN AT R C GREEN, GR	64,000	25/03/2008	149935920	In Use
10000022	Leasehold Land	COST OF LAND AT SITE B FOR 33/11kV SUB/STN (25% OF	1,215	24/02/2009	6104867.86	In Use
10000023	Leasehold Land	Leasehold Land SURAJPUR-SOUTH 33/11KV S/ STN	1,500	31/03/1997	1809165	In Use
10000024	Leasehold Land	LAND FOR S/S AT GIRDHARPUR	2,020	31/03/2002	960100	In Use
10000025	Freehold Land	Land at Village Hatewa (Near Bilaspur) for 33/11	843	07/10/2010	2400830	In Use

Asset No.	Asset Category	Asset Description	Quantity	Date of Capitalisation	Gross Block (Opening)	Status of Land
10000026	Freehold Land	Land at Jalpura, Greater Noida for 33/11KV	2,508	02/11/2010	14941230	In Use
10000027	Freehold Land	LAND AT VILLAGE LAKHNAWALI FOR 33/11 KV SUBSTATION	2,508	08/12/2010	16255460	In Use
10000028	Freehold Land	LAND AT VILLAGE KHERI FOR 33/11 KV SUBSTATION	1,421	28/12/2010	5795640	In Use
10000029	Leasehold Land	LAND AT INDUSTRIAL AREA SURAJPUR SITE-C HOUSING	3,400	20/01/2011	31691538.7	In Use
10000034	Leasehold Land	LAND AT PLOT NO. ESS-6, SECTOR-KP-V	1,500	08/05/2013	14068145	In Use
10000035	Leasehold Land	LAND AT PLOT NO. ESS-2, SECTOR-KP-V	1,500	08/05/2013	14068145	In Use
10000036	Leasehold Land	LAND AT PLOT NO. ESS-10, SECTOR-KP-V	1,500	08/05/2013	14068145	In Use
10000037	Leasehold Land	LAND AT PLOT NO.-ESS, ECOTECH-6	2,400	15/01/2014	22996421	In Use
10000038	Leasehold Land	LAND AT PLOT NO. 37/A, KP-I	2,560	26/03/2014	14668056	In Use
10000039	Leasehold Land	LAND AT PLOT NO. ESS, KP-IV	2,400	26/03/2014	13696392	In Use
10000040	Leasehold Land	LAND AT PLOT NO. POWER PLANT, ECOTECH-16 (JAUN	109,000	29/12/2013	169720283.4	Unused/Vacant
10000041	Leasehold Land	LAND AT PLOT NO. ESS-I, KP-5	37,281	27/03/2014	237239565	Unused/Vacant
10000042	Leasehold Land	220 KV S.STN - BZP AREA	16,807	06/02/2015	109264246	Unused/Vacant
10000043	Leasehold Land	33/11 K.V S.STN OMICRON-3	2,400	06/02/2015	17062904	In Use
10000044	Freehold Land	33/11KV ELECTRIC SUB/STN AT KHERI	120	21/09/2015	516020	In Use
10000045	Leasehold Land	LAND FOR 33/11KV ELECTRIC SUB/STN AT DELTA-III	1,630	22/09/2015	10323401	In Use

Asset No.	Asset Category	Asset Description	Quantity	Date of Capitalisation	Gross Block (Opening)	Status of Land
10000046	Leasehold Land	COST OF LAND FOR ELECTRIC SUB/STN AT KP-IV G.Noida	-	30/11/2015	0	In Use
10000047	Leasehold Land	LAND AT PLOT NO. ESS, SECTOR-XU-III	2,400	22/01/2016	29509194	In Use
10000048	Leasehold Land	LAND AT PLOT NO. ESS, OMICRON - 1A	3,617	22/01/2016	44456631	Unused/Vacant
10000049	Leasehold Land	LAND AT PLOT NO. ESS, SECTOR – 16	2,400	22/01/2016	29509194	In Use
10000050	Leasehold Land	LAND AT PLOT NO. ESS, ECOTECH – 15	1,500	22/01/2016	18452861	In Use
10000051	Leasehold Land	LAND AT PLOT NO. ESS, TECHZONE - IV	1,500	22/01/2016	18452861	In Use
10000052	Leasehold Land	LAND AT PLOT NO. ESS, BETA – II	1,469	22/01/2016	17205479	In Use
10000053	Leasehold Land	LAND FOR ELECTRIC SUB/STN AT KP-IV	1,640	27/11/2015	18418681	In Use
10000054	Leasehold Land	Land for 33/11 KV Elec Substation Sector-2, G.Noida	1,500	26/09/2016	18111964.5	In Use
10000055	Leasehold Land	Land for 33/11 KV Elec Substation Sector-3, G.Noida	1,500	26/09/2016	17222824	In Use
10000056	Leasehold Land	Plot No 33/11 KV ESS, Sector-10	2,400	14/02/2019	26775050	Unused/Vacant
10000057	Leasehold Land	Plot No 33/11 KV ESS, Sector Ecotech-11	3,000	14/02/2019	35192439	Unused/Vacant
10000058	Leasehold Land	Land for ESS, Sector Ecotech-1, Extension-1	3,000	22/01/2020	34820800	Unused/Vacant
10000059	Leasehold Land	Land for ESS, Sector 16B	1,500	22/01/2020	17423901	Unused/Vacant
10000060	Leasehold Land	Land for ESS, Sector Ecotech-III (Phase-1)	2,400	22/01/2020	27862030	Unused/Vacant
10000061	Leasehold Land	Land for ESS, Sector Ecotech-III (Phase-2)	2,400	22/01/2020	28947530	Unused/Vacant

Asset No.	Asset Category	Asset Description	Quantity	Date of Capitalisation	Gross Block (Opening)	Status of Land
10000062	Leasehold Land	Land for ESS, Sector Techzone (IT City)	10,004	22/01/2020	116052809	Unused/Vacant
10000063	Leasehold Land	Land for ESS, Sector Techzone 2 Greater Noida	3,000	22/01/2020	34820800	Unused/Vacant

The Auditor has made the following observations:

1 One of the Leasehold Land (10000021) on which GNIDA has constructed through UPPTCL, one 220/132/33 kV substation (R C Greens) on the land but did not hand over the substation to the company. Total land capitalized by the NPCL was Rs. 149935920.00 and depreciation was charged on the particular land till the period of audit is Rs. 18895089.00.

2 GNIDA has transferred the ownership of the sub-station to the company on payment of actual cost of sub-station. However, UPPTCL refused to give physical possession of the sub-station

3 NPCL has fled the appeal against the impugned order before APTEL. The appeal is still pending for decision

4 NPCL has considered it as a part of the capital expenditure since inception for the purpose of preparation of documents for petition and the same is also taken into consideration for calculation of depreciation, Interest, O&M, ROE, etc.

5 Similarly, for Gharbara EHV sub-station, Total land capitalized by the NPCL was Rs. 82003420.00 and depreciation was charged on the particular land till the period of audit is Rs. 10326864.00. The appeal is pending for decision.

The auditor submitted that until the disputes were resolved (whatever be the decision) such assets should not be taken into consideration for the purpose of APR, ARR etc. for such things consumers cannot be burdened and needs to disallowed along with consequential gains on depreciation, ROE, tax, interest and O&M. (is there any provision in books if decision goes against company, however auditee informed us that UPERC has already disallowed the CAPEX and its consequential impact & the matter is sub-judice.

6 As per Electricity Supply Code, 2005 and amendments issued thereafter Supervision charges 15% of the cost of Electrification. (Transfer of assets from GNIDA and others) for maintenance & operation.

7 Total transfer of assets from GNIDA and others amounted to Rs. 355.81 Crore, 15% supervision charges must be recovered from GNIDA and others, and must be taken into consideration.

Depreciation on vacant Leasehold Land-Out of total no of 59 Lands, 16 Lands were found vacant, and which were taken into CAPEX, for such a capital expenditure which were not in use and depreciation has been charged on the same (unproductive unless until it become productive). However, it is pertinent to mention here that commission has already disallowed.

Asset No.	Asset Description	Depreciation for the year
10000010	COST OF LAND FOR ELECTRIC SUB/STN AT ETA-I, GR NOI	63,259.14
10000012	COST OF LAND FOR ELECTRIC SUB/STN AT PI-I, GR NOID	26,771.33
10000014	LAND FOR ELECTRIC SUB/STN AT PHI-II/III, GR No	23,185.23
10000020	COST OF LAND FOR ELECTRIC SUB/STN AT BZP, GR NOIDA	55,799.93
10000040	LAND AT PLOT NO. POWER PLANT, ECOTECH-16 (JAUN	1,885,780.93
10000041	LAND AT PLOT NO. ESS-I, KP-5	2,635,995.17
10000042	220 KV S.STN - BZP AREA	1,214,047.18
10000048	LAND AT PLOT NO. ESS, OMICRON - 1A	493,962.57
10000056	PLOT NO 33/11 KV ESS, SECTOR-10	297,500.56
10000057	PLOT NO 33/11 KV ESS, SECTOR ECOTECH-11	391,027.10
10000058	LAND FOR ESS, SECTOR ECOTECH-1, EXTENSION-1	386,897.78
10000059	LAND FOR ESS, SECTOR 16B	193,598.90
10000060	LAND FOR ESS, SECTOR ECOTECH-III (PHASE-1)	309,578.11
10000061	LAND FOR ESS, SECTOR ECOTECH-III (PHASE-2)	321,639.22
10000062	LAND FOR ESS, SECTOR TECHZONE (IT CITY)	1,289,475.66
10000063	LAND FOR ESS, SECTOR TECHZONE 2 GREATER NOIDA	386,897.78

Asset No.	Asset Description	Depreciation for the year
Total Depreciation Charged		**9,975,416.59**

Capital Expenditure in FY 2020-21- The Total Capital expenditure during FY 2020-21 was Rs. 100.19 Crore. Detailed break up of expenditure under each head of activity carried out is given in chart below:

	Past Year		Current Year	Between FY 2019-20 & FY 2020-21		Between FY 2018-19 & FY 2019-20	
Name of Project	FY 2018-19	FY 2019-20	FY 2020-21	Variation	% Variance	Variation	% Variance
	Audited	Audited	Audited				
New Connection	17.75	18.11	25.56	(7.45)	(41.15)	(0.35)	(2.00)
Replacement Stock	5.18	4.50	2.03	2.46	54.81	0.68	13.18
Metering	0.26	0.59	2.52	(1.93)	(327.21)	(0.33)	(127.67)
33/11 kV Substation	13.94	25.57	5.01	20.56	80.41	(11.63)	(83.42)
33 kV Network Development	14.01	18.87	17.30	1.57	8.33	(4.86)	(34.65)
11 kV Network Development	18.05	19.60	14.31	5.29	27.01	(1.55)	(8.60)
LT Network Development	17.62	21.62	8.45	13.17	60.92	(4.00)	(22.68)
Network Renovation	0.56	1.00	0.53	0.47	47.25	(0.44)	(77.27)
Process System Automation	6.43	7.44	5.16	2.28	30.67	(1.00)	(15.57)
Civil Works & Office Infrastructure Facility	12.03	16.78	9.37	7.42	44.19	(4.76)	(39.55)
IT Projects	4.34	7.06	9.81	(2.75)	(38.95)	(2.72)	(62.69)
Tools & Testing Equipment	0.45	0.02	0.03	(0.01)	(38.84)	0.44	95.99
Vehicles	1.93	1.92	0.14	1.79	92.76	0.00	0.10
Demand Side Management	-	-	-	-			
Leasehold Land	6.20	25.99	-	25.99	100.00	(19.80)	(319.46)
Payment to UPPTCL for construction of 5 Nos. 33kV Bay at 400/220/132/33kV UPPTCL Substation at Sector 148 Noida		20.48		20.48	100.00	(20.48)	
Payment to UPPTCL for construction of 220kV LILO at 220/132/33kV R C Green Substation connecting 400kV Substation at Pali, Greater Noida		19.12	-	19.12	100.00	(19.12)	
Misc./Contingent Works	6.62	-	-	-		6.62	100.00
Interest / Expense Capitalization	Nil	Nil	Nil				
Salary Capitalization	Included Above	Included Above	Included Above				

	Past Year		Current Year	Between FY 2019-20 & FY 2020-21		Between FY 2018-19 & FY 2019-20	
Name of Project	**FY 2018-19**	**FY 2019-20**	**FY 2020-21**	**Variation**	**% Variance**	**Variation**	**% Variance**
	Audited	**Audited**	**Audited**				
Total	**125.38**	**208.67**	**100.19**	**108.48**	**51.98**	**(83.29)**	**(66.43)**

The following observations are made as per the above table:

1 In case of new connections, there is jump of almost 42% in FY 2020-21 as compared to previous year i.e., FY 2019-20, whereas it was increased by just 2% in FY 2019-20 as compared to 2018-19.

2 Similarly, in case of metering it has gone up by 327.1% in FY 2020-21 as compared to previous year i.e., FY 2019-20, whereas it was increased by just 127.67% in FY 2019-20 as compared to FY 2018-19.

3 For IT projects and Tool testing equipments it has increased by 38.95% & 38.84% in FY 2020-21 as compared to previous year i.e., FY 2019-20, whereas it was increased by just 62.69% in FY 2019-20 as compared to FY 2018-19 in case of IT projects, In rest of the projects it has come down.

4 Overall CAPEX has decreased from Rs. 208.67 Crore to Rs. 100.19 Crore as compared to previous year FY 2019-20, almost 52%, whereas it has increased by 66.43% as compared to FY 2018-19 to FY 2019-20.

Approved and actual amount of Capital Expenditure for FY 2020-21

	Summary of Capital Expenditure FY 2020-21 (Rs. Crore)		
Sl. No.	**Nature of Works**	**Approved**	**Actual**
1	New Connections, Replacement Stock & Metering	**183.30**	30.11
2	Substations, Transformers, 33kV, 11 kV & LT Network		45.59
3	Process System Automation		5.16
4	IT Projects		9.81
5	Civil Works & Office Infrastructure Facility		9.37
6	Tools & Testing Equipment		0.03
7	Vehicles		0.14
8	**Sub-Total**	**183.30**	**100.19**

	Summary of Capital Expenditure FY 2020-21 (Rs. Crore)		
Sl. No.	**Nature of Works**	**Approved**	**Actual**
9	Interest Capitalization	0	Nil
10	Salary Capitalization	9.00	9.82
11	**Sub-Total**	**192.30**	**100.19**
12	Add: Assets taken over from GNIDA & Other Agencies	1.00	135.28
13	**Grand Total**	**193.30**	**235.47**

Comparative increase/decrease in CAPEX and Employee Cost

Financial Year	CAPEX	CAPEX decreased /increased	CAPEX (decreased) /increased in %	Employee Cost Capitalized	Employee Cost (decreased)/ increased	Employee Cost (decreased)/ increased in %
2018-19	125.38	-		8.99	-	-
2019-20	208.67	83.29	66.43	10.32	1.33	14.79
2020-21	100.19	(108.48)	(51.98)	9.82	-0.5	(4.84)

It is observed that in the year 2020-21 CAPEX has decreased by 51.98% but Employee cost which was capitalized (mostly supervision charges) has just decreased by 4.84%.

Audit of OPERATION AND MAINTENANCE (O&M)- O&M expenses approved as per Distribution Tariff Regulations and the O&M expenses for the base year is escalated by the weighted average of the Wholesale Price Index and Consumer Price Index in the ratio of 60:40. Where figures for base year is not available, the same is allowed a percentage of Capital Cost and increment expenses are allowed @2.50% of the Capital addition during the year.

Sl. No.	Category	Approved by UPERC	Actual/ Audited	Variance	% Variance
1	Employee Benefits Expenses	24.94	56.29	31.35	125.72
2	Administrative & Other Expenses	13.37	13.06	(0.31)	(2.32)
3	Repair & Maintenance Expenses	34.97	45.43	10.45	29.89
4	**Total O&M**	**73.28**	**114.78**	41.50	56.63
5	Employee cost Capitalization	-9.00	-9.82	(0.82)	9.12
6	**Net O&M**	**64.28**	**104.96**	40.68	63.28

i) **O&M expenses-** The actual O&M expenses are Rs. 40.68 Crore more than the approved amount of Rs 64.28 Crore and it is 63.28% higher than the approved amount.

ii) **Employee expense-** Employee expenses there is huge variation of 125.72% between approved and actual.

iii) **Repair & Maintenance expenses-** R&M expenses has increased by 29.89%,

iv) **A&G expenses-** It is observed that there is a decrease in A&G expenses by 2.32%.

Statement showing Comparison between Actual of two consecutive years

O&M Expenses	**Actual FY 2019-20**	**Actual FY 2020-21**	**Variation**	**Variance %**
	Rs. Crore	Rs. Crore		
Salaries & Wages	51.43	51.87	0.44	0.85
Contribution to PF & Gratuity etc.	4.23	3.35	(0.88)	(20.82)
Staff Welfare Expenses	1.20	1.07	(0.12)	(10.37)
Less: Expenses Capitalized	(10.32)	(9.82)	0.50	(4.80)
Other Expenses	113.51	78.32	(35.19)	(31.00)
TOTAL	**160.05**	**124.79**		
Less:				
Bad Debts W/o	8.56	6.80	(1.76)	(20.61)
Provision for Bad Debts	8.20	10.98	2.78	33.95
Loss on retirement of Fixed Assets	1.82	0.47	(1.35)	(73.99)
GST Impact	-	1.41		
Loss on fair value of investment (not considered in ARR determination)	0.09	-		
CSR Expenses	26.56	0.17	(26.38)	(99.35)
Subtotal	**45.23**	**19.83**		
Net O&M Expenses	**114.82**	**104.96**	(9.86)	(8.59)

INCREASE IN MINIMUM WAGES:

(i) It is observed that all enterprise, associations, partnership, body corporates, companies etc. are bound by the provisions of Minimum Wages act 1948 and Government of State of Uttar Pradesh revises minimum wages under the provisions of the Minimum Wages Act, 1948 twice in a year (i.e., with effect from April and October). During FY 2020-21, the State Government vide notification has revised the minimum wages as per the following details in below Table: -

	Minimum Wages in the state of Uttar Pradesh				
Types of Labour	Minimum Wages prevailing on 01-04-2013	Minimum Wages Revised from 01-04-2020	Minimum Wages Revised from 01-10-2020	Increase from base 2013	% Increase
Unskilled	4,976.00	8,625.00	8,757.85	3,781.85	76.00
Semi-skilled	5,672.00	9,487.50	9,634.00	3,962.00	69.85
Skilled	6,296.00	8,757.85	10,791.00	4,495.00	71.39

(ii) The wages applicable from October 01, 2020 was higher by 65-75% as compared to wages prevailing on April 2013. Thus, the wages applicable for the period of audit were much higher in comparison with the FY 2013-14. The minimum wages have a direct and substantial impact on most of the components of O&M expenses. Further, as lower cadre staffs are governed by the provisions of the Minimum Wages Act-1948, increase in minimum wages also leads to consequent cascading effect on remuneration of senior cadre staff as well.

Financial Year	**Employee Cost**	**Employee Cost Capitalised**	**Employee Cost after capitalisation**	**% Salary Capitalised**
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

It is observed that the employee cost capitalized in FY 2020-21 is lower than the amount capitalized in the previous year (FY 2019-20) and the high amount of employee cost capitalization, it was all due to high supervision employee cost of the projects.

11. Captive Consumption

Summary of Captive Consumption Project/Location wise

Sl. No.	**Location**	**Consumption (kWh)**
1	ALPHA-1	24,718.72
2	BUILDERS AREA	74,959.12
3	CHI-3	20,176.00
4	CONTAINER	11,068.00
5	DELTA-2	46,816.80

Sl. No.	Location	Consumption (kWh)
6	DM AWAS	19,446.64
7	EPIP	20,214.72
8	ETA	4,222.72
9	GIRDHARPUR	27,806.00
10	HATEWA	13,160.64
11	JALPURA	22,952.00
12	KNOWLEDGE PARK-2	139,458.32
13	KNOWLEDGE PARK-3	175,819.10
14	LAKHNAWALI	15,156.00
15	SECTOR-37	44,189.68
16	SIGMA-4	60,539.52
17	SITE-B	43,494.00
18	SITE-C STORE	12,227.92
19	SUNPURA	3,886.48
20	SURAJPUR	68,736.91
21	SURAJPUR SOUTH	1,444.00
22	UDYOG KENDRA	19,494.00
23	SAWRAN NAGRI SUBSTATION	14,204.00
24	CHI-4 SUBSTATION	59,020.00
25	BETA-1 SUBSTATION	17,283.52
26	GAMA SUBSTATION	12,912.00
27	P-3 SUBSTATION	17,020.24
28	LUKSAR JAIL	11,496.00
29	DELTA-1	11,542.24
30	BIRONDI	29,007.89
31	XU-I	35,414.94
32	ESS-10	21,494.26
33	ESS-2	19,924.65
34	ECOTECH -EXT1	9,016.00
35	IT CITY-1	8,727.20
36	ECOTECH-6	28,302.21
37	OMICRON-3	21,530.68
38	Sector 36 (Pocket Substation)	17,220.64
39	KP-1 (Pocket Substation)	28,746.40
40	KP-4	531,577.80
41	KP-4	334,444.80
42	Zeta-1	27,667.75
43	KP-1 (Customer Care Centre)	145,670.40
44	KP-1 (Customer Care Centre)	57,545.60
45	Gharbara - 220 kV	30,832.00

Sl. No.	Location	Consumption (kWh)
46	Maripat Power Plant	4,590.45
47	Maripat Power Plant	6,288.90
48	Ecotech-15	11,317.95
49	Ecotech-2	84,631.08
50	Beta-2	19,500.80
51	Sector-16	17,944.00
	TOTAL	**2,504,861.69**

It is observed that 2504861 kWh were captively consumed by NPCL at different locations, and as per auditee they all are adjusted against sold units with zero value against sales. The Auditor observed that the energy 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. Further, NPCL has not provided the list of Nil rated billing addresses therefore genuineness of consumption for purpose of electricity distribution cannot be assessed. The Auditor stated that units should be shown separately for captive consumption as required for proper accountability and control.

Audit of Financial Accounts with special emphasis to ARR

a. Actual Income tax paid as per Challans:

Summary of Tax Challans					
Sl. No.	**Particular**	**Amount in Rs.**	**Date of Payment**	**Challan No.**	**Bank**
1	Advance Tax for FY 2020-21	25,000,000	6/15/2020	19895	HDFC Bank
2	Advance Tax for FY 2020-21	70,000,000	9/14/2020	17229	ICICI Bank
3	Advance Tax for FY 2020-21	50,000,000	12/15/2020	61598	HDFC Bank
4	Advance Tax for FY 2020-21	60,000,000	12/15/2020	22621	ICICI Bank
5	Advance Tax for FY 2020-21	19,000,000	3/15/2021	79869	HDFC Bank
	Total	224,000,000			

During the period of audit, the Auditor has verified all the documents and tax Challans of Income tax. From the above table, NPCL has deposited an advance tax of Rupees 22.40 Crore for the period of audit (2020-21) on different dates and respective Challans to different banks.

As per the financial statements of the auditee, total current tax expense of the company for the period of audit 2020-21 is Rupees 22.75 Crore. It is also observed that the company has claimed the Income tax at the rate of 25.17% as against approved Income tax rate of 34.94%.

For income tax claimed of 25.17%, the new section – Section 115BAA has been inserted in the Income Tax Act, 1961 to give the benefit of a reduced corporate tax rate for the domestic companies. Section 115BAA states that domestic companies have the option to pay tax at a rate of 22% plus sc of 10% and cess of 4%. The Effective Tax rate being 25.17% from the FY 2019-20 (AY 2020-21) onwards if such domestic companies adhere to certain conditions specified.

Statement showing Comparison between Approved & Actual

Sl. No.	Nature of Tax	Approved	Actual
1	Return on Equity (a)	61.40	67.65
2	Add/Less: Efficiency Gains (b)	0.00	0.00
3	Taxable Return [c=a+b]	61.40	67.65
4	Income Tax Rate (d)	34.94%	25.17%
5	Total Tax Expense	32.98	22.75

Bad Debts

Statement showing Variations on Bad Debts and Receivables

Particulars				Between 2020-21 & 2019-20		Between 2019-20 & 2018-19	
Details	Claimed in FY 2018-19	Claimed in FY 2019-20	Claimed in FY 2020-21	Variance	Variance (%)	Variance	Variance (%)
Actual bad and doubtful debts written off	5.90	8.56	6.80	1.76	20.61	2.67	45.28
Receivables for the year	1575.61	1786.89	1761.06	25.82	1.45	211.28	13.41
Bad and doubtful debt as % of Receivables (%)	0.89%	0.94%	1.01%	0.07%	7.44%	0.05%	5.61%

During the period of audit, the Auditor found that actual bad & doubtful debts written of has come down from Rs.8.56 Crore to Rs 6.80 Crore, whereas receivables has come down by 1.45%. Total bad and doubtful debts as a percentage of receivables have increased to 1.01% from 0.94% of the previous year.

GST Impact

The GST impact expenses have been specifically disallowed by the UPERC.

	Reconciliation of Indirect Taxes						
				(Goods and Service Tax)			
	Particulars	**Assessable Value**	**Excise Duty**	**CGST**	**SGST/UTGS**	**IGST**	**Cess**
	Duties/Taxes Payable						
	Excise Duty						
1	Domestic						
2	Export						
3	Stock Transfers (Net)						
4	Others (if any)						
5	**Total Excise Duty (1 to 4)**	-	-	-	-	-	-
6	Vat,CST,Cess etc						
7	Other StateTaxes, If any						
	Goods and Service Tax						
8	Outward Taxable Suppliers (Other than zero rated, nil Rated and Exempted)	8,387.48		708.58	708.58	2.27	
9	Outwards Taxable Syppliers (zero Rated)	0.17					
10	Inwards Suppliers (Liable to Reverse Charge)					0.03	
11	Other Outward Suppliers (Nil Rated, Exempted)	166,311.88		8.38	8.38	109.00	
12	Non-GST Outwards suppliers						
13	**Total (8 To 12)**	**174,699.53**	**-**	**716.96**	**716.96**	**111.30**	**-**
14	**Total duties/Taxes payble (5+6+7+13)**	**174,699.53**	**-**	**716.96**	**716.96**	**111.30**	**-**
	Duties/Taxes paid (by utilisation of Input Tax Credit and Payment through Cash Ledger, as the case may be)						
	Input Tax Credit Utilised						
15	CGST						
16	SGST/UTGST						
17	IGST						
18	Cess						
19	Transitional Credit						
20	Others if any						
21	**Total Input Tax Credit Utilized (15 To 20)**	-	-	-	-	-	-
22	Payment through Cash Ledger			-	-	-	
23	**Total Duties/Taxes paid(21+22)**	**0.000**	**0.000**	**716.960**	**716.960**	**111.300**	**0.000**
	Difference between Taxes paid and Payable(14-23)		-	**0**	**0**	**0**	- 0
24	**Interest/Penalty/Fines paid**						

From the above table it is clear that company has paid all its dues and there is no difference between the taxes paid and payable, however it relevant and necessary to mention here that GST expenses has been specifically disallowed by the UPERC.

Interest on Long term loan, Individual rate & weighted average rate

Statement showing Interest on Term Loan for the year 2020-21			
		Amount in Crores	
S.NO	**Loan Computation**	**Approved**	**Actual**
1	Opening Gross Normative Loan		1,098.43
2	Opening Cumulative repayment of Normative Loan	487.31	586.90
3	**Opening Net Normative Loan**	**487.31**	**511.54**
4	Increase /Decrease due to ACE during the period	120.29	89.39
5	Repayment of Normative Loan during the year	44.58	49.95
6	**Closing Net Normative Loan**	**563.03**	**550.97**
7	Average Normative Loans	525.17	531.25
8	Weighted average rate of Interest of Interest on actual Loans	9.91%	9.91%
9	**Interest on Normative Loans**	**52.06**	**52.66**

It is clear from the above table that UPERC in its tariff order has approved the interest on term loan at Rs. 52.06 Crore based on additional debt requirement of Rs. 120.29 Crore.

Actual amount of Interest on normative loans is higher by Rs. 0.60 Crore in comparisons with approved amount of Interest on normative loans similarly actual repayment of normative loan is also higher by Rs. 5.37 Crore as compared to approved repayment of normative loan during the year.

12. Other Observation:

The Auditor has demanded procurement policy of the company (they provided procurement procedure) but not provided procurement policy, as there is a lack of fair competition in respect of product & services from the market for example purchasing of meter, there is no process of assessment of requirement of meter and as per verbal communication they have selected only meter of one company i.e. Secure Meter Limited but purchases made from the other parties in a small quantity of order at a market price. This should be if done directly from the company. Reason for not purchasing directly from the company is not appropriately replied neither any documentary evidence has been produced before the Auditor.

It is observed that in relation to work contracts, they have fixed the standard prices of each specific work and the work has been given as per the specific rate but no rate list of specific work has been provided to the Auditor, also the mechanism of fixing the rate and the procedure and process for selection of vendor has not been provided to the Auditor.

It is observed that advisory services of legal firm (M/s Khaitan & Co. is also a related party) has been availed at the fixed rate of Rs. 25 lakhs per month plus GST and other specific services charges, but no selection procedure or competitive bidding has been taken or followed by NPCL and this amount has been paid on lump-sum basis without any detail for calculation the amount. As per the agreement payment is to be made within 15 days of the invoice date or mutually agreed, but no such mutual agreement is shown to us in which payment is to be made lump-sum. A tax invoice amounted of Rs. 30000000.00 (Rs. 25 lakh *12) for retainer ship (as per agreement) has been raised on February 09, 2021 for the period 2020-21 and another one for Rs. 13000000.00 has been raised on March 24, 2021 for the same period 2020-21, but no calculation, justification and classification has been produced before the Auditor for this amount.

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.

Commission’s Observation

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 optimise the cost, failing which appropriate action may be taken by the Commission.

4 TRUE UP OF FY 2020-21

4.1 BACKGROUND

4.1.1 NPCL has sought the final truing up of expenditure and revenue for FY 2020-21 based on actual expenditure and revenue as per audited accounts. In this section, the Commission has analysed all the elements of actual revenue and expenses for FY 2020-21 and has undertaken the truing up of expenses and revenue after prudence check of the data made available by the Petitioner.

4.1.2 The Petitioner submitted that Regulation 6.1 & 6.2 of MYT Regulation, 2019 provides for True Up of the Aggregate Revenue Requirement of the Distribution Licensee. The Regulation 6.1 & 6.2 of the MYT Regulations, 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.*
>
> *a) ………….*
>
> *b) ……….*
>
> ………………………

Unquote

4.1.3 The Petitioner submitted that Regulation 6.2 of the MYT Regulations, 2019 provides that the 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. Accordingly, the Petitioner has submitted its audited accounts for FY 2020-21.

4.2 NUMBER OF CONSUMERS, CONNECTED LOAD AND SALES

Petitioner's Submission

4.2.1 The Petitioner submitted that during FY 2020-21, the Company achieved sales of 2,012.05 MU and revenue of Rs. 1,677.18 Crore as against 2,002.96 MU and Rs. 1,639.07 Crore approved by the Commission vide Tariff Order dated December 04,2020.

4.2.2 The Petitioner submitted that the during FY 2020-21, the Company recorded unrestricted peak demand of 446 MW against which it was able to supply 426 MW power due to restrictions imposed by UPPTCL/UPSLDC on transmission of power to Greater Noida area.

4.2.3 Further, the Petitioner submitted that the Commission in its Tariff Order for FY 2020-21 dated December 04, 2020 approved the No. of Consumers and Connected Load for FY 2020-21 as 107,992 and 1,180.41 MW respectively, based on the submissions made by the Petitioner, while, as per Audited Accounts, the actual number of Consumers and Connected Load are 106,707 and 1146.58 MW, respectively, as shown in the Table below:

TABLE 4-1: NO. OF CONSUMERS AND CONNECTED LOAD FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER

Sl. No.	Category	No. of Consumers	Connected Load (MW)
1	LMV-1: Domestic Light, Fan & Power	95,855	449
2	LMV-2: Non-Domestic Light, Fan & Power	3,336	28
3	LMV-3: Public Lamps	342	11
4	LMV-4: Institution	520	7
5	LMV-5: Private Tube Wells	1,249	6
6	LMV 6: Small and Medium Power	3,324	77
7	LMV-7: Public Water Works	246	8
8	LMV-8: STW and Pumped Canals	8	0
9	LMV-9: Temporary Supply	751	20
10	HV-1: Non-Industrial Bulk Power	218	116

Sl. No.	Category	No. of Consumers	Connected Load (MW)
11	HV-2: Large and Heavy Power	858	424
	Total	**1,06,707**	**1,146.58**
	For FY 2019-20	97,682	1,072.87
	Growth over previous year	**9.24%**	**6.87%**

4.2.4 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 (GNIDA), Central / State Govt. schemes like “Saubhagya” scheme etc., however, the actual number of consumers and connected load has varied because of variations in the aforesaid parameters.

4.2.5 The Petitioner submitted that COVID-19 Pandemic has caused major disruption globally as well as in India since March, 2020. Starting from total lock down, severe restrictions in containment Zones including on movement of people / goods in the entire NCR region, quarantine measures to partial lock down, imposition of section 144 and curfews during weekends & night etc. affected the sales and consumption patterns significantly. Gautam Buddha Nagar district covering Noida & Greater Noida was amongst highest reporting COVID-19 infection resulting in to severe restriction / disruption in work. Even, during November, 2020 sudden spurt of COVID-19 again pushed back the momentum somewhat gained in previous 2-3 month. The sales mix changed significantly especially during first quarter as the drawl by industries has come to a standstill while that of Urban and Rural Areas increased resulting into higher LT Sales and lower HT Sales.

4.2.6 On the basis of above details of Connected Load and Consumer Numbers, the Petitioner requests the Commission to approve the same as per Audited Accounts for FY 2020-21.

4.3 ENERGY SALES

4.3.1 The Petitioner has submitted that the actual category-wise sales for FY 2020-21 as per Audited Annual Accounts are given in the Table below:

TABLE 4-2: DETAILS OF ACTUAL CATEGORY WISE SALES AS SUBMITTED BY THE PETITIONER FOR FY 2020-21 (MU)

Sl. No.	**Category**	**Sales (MU's)**	**Revenue (Rs. Crore)**	**ABR (Rs./kWh)**
1	LMV-1: Domestic Light, Fan & Power	617.44	409.11	6.63
2	LMV-2: Non Domestic Light, Fan & Power	33.78	39.30	11.63
3	LMV-3: Public Lamps	31.06	28.72	9.25
4	LMV-4: Institutions	10.37	9.24	8.91
5	LMV-5: Private Tube Wells	19.47	4.38	2.25
6	LMV 6: Small and Medium Power	82.46	88.02	10.67
7	LMV-7: Public Water Works	22.54	24.88	11.04
8	LMV-8: STW and Pumped Canals	0.09	0.21	24.43
9	LMV-9: Temporary Supply	43.88	56.75	12.93
10	HV-1: Non Industrial Bulk Power	164.77	191.32	11.61
11	HV-2: Large and Heavy Power	986.19	825.26	8.37
12	**Total**	**2,012.05**	**1,677.18**	**8.34**
**Total may not tally due to rounding offs*				

4.3.2 The Petitioner submitted that the Commission had approved the sales and revenue at 2,002.96 MU and Rs. 1,639.07 Crore respectively, based on various assumptions with respect to various factors like free and 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.

4.3.3 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 which the Commission would appreciate, are beyond the control of the Company, therefore, the actual sales, revenue and average billing realization (ABR) as per Audited Accounts will vary as compare to the same approved vide Tariff Order dated December 04, 2020.

4.3.4 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 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 Company prepares its Audited Financial Statement on the basis of such system generated sales register only.

4.3.5 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 are often found to be 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 in 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 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 authorised consumer numbers and connected load as mentioned in the forms prescribed by the Commission. Such assessed and recovered amount is also included in the sales of LMV-1 and LMV-5 categories which the Commission has been otherwise considering as “Excess Sales”.

4.3.6 The Petitioner submitted that the treatment of accounting for assessed consumption in theft cases is in line 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: -*

> *“……….*
>
> *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. <u>Thus, the assessed energy has to be considered as supplied by the distribution licensee to the concerned person.</u>*
>
> *7.12 <u>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.</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 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 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.*
>
> *…………."*

4.3.7 The Petitioner requested the Commission to True-Up the sales for FY 2020-21 including the unmetered sales for LMV-1 and LMV-5 category on the basis of Audited Annual Accounts.

Commission's Analysis

4.3.8 The Commission observed that in FY 2020-21, the no. of consumers & connected load have increased at 9.24% & 6.87% respectively however the sales have decreased by 3.30%. The Commission vide deficiency letter dated June 20, 2022 sought justification for the same. In reply to the Commission's query the Petitioner submitted the impact of COVID-19 pandemic on the operations of FY 2020-21 as below:

i. The Petitioner submitted that the COVID-19 Pandemic caused major disruption globally as well as in India since March, 2020. Starting from total lock down, severe restrictions in containment Zones including on movement of people / goods in the entire NCR region, quarantine measures to partial lock down, imposition of section 144 and curfews during weekends & night etc. affecting the sales and consumption patterns significantly. Gautam Buddha Nagar district covering Noida & Greater Noida was amongst highest reporting COVID-19 infection resulting in to severe restriction / disruption in work. Even, during November, 2020 sudden spurt of COVID-19 again pushed back the momentum somewhat gained in previous 2-3 months. Due to the same, the sales mix changed significantly especially during first quarter in which generally the sales are the highest amongst various quarters in a normal year. Due to the above, the industrial, commercial and institutional load was severely impacted whereas domestic consumption both in rural and urban areas increased as compared to earlier years resulting into change in the consumption mix.

ii. Hence, due to the restriction on the movement of human beings and to stay at home for quarantine, there was a considerable decline in the demand of electricity from industrial, commercial and institutional segments especially in the first quarter of FY 2020-21 while the demand of domestic consumers shot-up as compared to earlier years. With subsequent relaxation in the quarantine guidelines, the Company was able to process the new connection applications, resulting-in increase in number of consumers and connected load.

iii. In view of the above, the number of consumers & connected load increased at 9.24% & 6.28% respectively and at the same time the sales decreased by 3.30%. Further, there was also decline in the construction activities due to the above reasons resulting into lower new connections, load and sales in LMV-9 category.

4.3.9 The Commission observed that further, in case of LMV-1 there is increase in no. of consumers & connected load is 9.57% & 11.87% however sales have increased by only 5.30%. For the categories from LMV-1 to LMV-6 & HV-1 and HV-2, no. of consumers & connected load have increased however sales have decreased. In case of LMV-9, no. of consumers, connected load & sales have decreased by 1.70%, 10.59% & 3.95% respectively. The Commission vide deficiency letter dated June 20, 2022 sought justification for the same; in reply the Petitioner reiterated its submissions regarding the disruption caused due to COVID -19 Pandemic.

4.3.10 The Commission observed that the actual energy sales for FY 2020-21 are higher by 9.09 MU than the energy sales approved by the Commission for FY 2020-21 vide Tariff Order dated December 04, 2020. The energy sales in FY 2020-21 represents a decrease of 3.29% over the energy sales in FY 2019-20. The Commission approves the actual energy sales at 2012.05 MU. The category wise energy sales for FY 2020-21 is shown in the Table below:

TABLE 4-3: CATEGORY WISE SALES APPROVED BY THE COMMISSION FOR FY 2020-21

Sl. No.	Category	Tariff Order for FY 2020-21 dated 04.12.2020	True up Petition	Approved
1	LMV-1: Domestic Light, Fan & Power	636.51	617.44	617.44
2	LMV-2: Non-Domestic Light, Fan & Power	33.57	33.78	33.78
3	LMV-3: Public Lamps	33.13	31.06	31.06
4	LMV-4: Institutions	13.91	10.37	10.37
5	LMV-5: Private Tube Wells	22.94	19.47	19.47
6	LMV 6: Small and Medium Power	78.67	82.46	82.46
7	LMV-7: Public Water Works	22.23	22.54	22.54
8	LMV-8: STW and Pumped Canals	0.18	0.09	0.09
9	LMV-9: Temporary Supply	37.65	43.88	43.88
10	LMV-11: Electric Vehicle Charging	6.15	0	0
11	HV-1: Non-Industrial Bulk Power	218.52	164.77	164.77
12	HV-2: Large and Heavy Power	899.49	986.19	986.19
	Sub Total	**2,002.96**	**2,012.05**	**2,012.05**

4.3.11 The Category wise number of consumers, connected load and energy sales approved/Trued up for FY 2020-21 are shown in the Table below:

TABLE 4-4: CATEGORY WISE NO. OF CONSUMER, CONNECTED LOAD & ENERGY SALES AS APPROVED OF NPCL FOR FY 2020-21

Sl. No.	Category	No. of consumers	Connected Load (MW)	Sales (MU)
1	LMV-1: Domestic Light, Fan & Power	95855	449.49	617.44
2	LMV-2: Non-Domestic Light, Fan & Power	3336	28.21	33.78
3	LMV-3: Public Lamps	342	10.93	31.06
4	LMV-4: Institutions	520	6.83	10.37
5	LMV-5: Private Tube Wells	1249	6.16	19.47
6	LMV 6: Small and Medium Power	3324	76.56	82.46
7	LMV-7: Public Water Works	246	8.45	22.54
8	LMV-8: STW and Pumped Canals	8	0.10	0.09
9	LMV-9: Temporary Supply	751	19.72	43.88
10	LMV-11: Electric Vehicle Charging	0	0.00	0.00
11	HV-1: Non-Industrial Bulk Power	218	116.17	164.77
12	HV-2: Large and Heavy Power	858	423.96	986.19
	Sub Total	**106707**	**1146.58**	**2012.05**

4.3.12 The Commission observed that the Petitioner has overbooked sales in the unmetered categories with respect to the norms of sales approved by the Commission for the unmetered categories vide Order dated December 09, 2016 in suo-moto proceedings in the matter of "*Revision of consumption norms for unmetered category of consumers*". As per this Order the consumption norms were applicable for 5 State Discoms which cover almost the whole State irrespective of regional and demographic variations and other variable parameters and as NPCL is also part of the State and shares boundaries with Discoms, hence can be safely estimated that the same norms can be logically applied for NPCL also. Hence, the norms for LMV-1 domestic rural un-metered has been considered as 144 kWh/kW/month. Further, for LMV-5 unmetered category the Commission had disallowed the sales considering the norm of 137.49 kWh/kW/month in True up of FY 2018-19. Further, the State Discoms had filed a review petition against the True-up order of FY 2018-19 vide Petition No. 1718 of 2021 for taking the norm of 137.49 kWh/kW/month for LMV-5 category, wherein the Commission vide Order dated 18.8.2021, elaborated / discussed in detail, the reasons for taking a conscious decision for considering the said norm. However, this norm has been revised to 140 kWh/kW/month for FY 2019-20 (as approved in Tariff Order for FY 2019-20 dated

September 03, 2019 of State Discoms).

4.3.13 The Commission has computed the excess sales booked by Petitioner, based on the above discussed normative consumption as under:

TABLE 4-5: NORMS FOR NPCL FOR SALES

Category	**No. of consumers (Nos.)**	**Connected Load/ Contracted Demand (MW)**	**Total Energy Sales (MU)**	**kWh Per kW per month**	**Norm kWh Per kW per month**	**Sales as per Norms approved (MU)**	**Excess Sales booked/Sales under booked (MU)**
LMV 1 (Dom: Rural Schedule (unmetered)	2141	5.34	12.67	197.79	144	9.23	3.45
LMV 5 PTW: Rural Schedule (unmetered)	662	3.14	13.24	351.09	140	5.28	7.96
Total							**11.41**

4.3.14 For the purpose of truing up, the Commission is not allowing the excess sales of 11.41 MU booked under the unmetered categories and the corresponding treatment of the same has been done in the power purchase section. Accordingly, the Commission has approved the actual Sales of 2000.64 MU (2012.05-11.41) and Billing Determinants i.e., No. of consumers and connected load (kW) as actuals, for FY 2020-21.

4.3.15 It has been observed that no separate Billing Determinants for lifeline consumers, in rural as well as urban areas, has not been provided because of this the condition of supply and norms cannot be verified. 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.

4.4 ENERGY BALANCE AND DISTRIBUTION LOSS

Petitioner's Submission

4.4.1 The Petitioner has submitted that COVID -19 Pandemic has caused major disruption globally as well as in India since March, 2020. Starting from total lock down, severe restrictions in containment Zones including on movement of people / goods in the entire NCR region, quarantine measures to partial lock down, imposition of section 144 and curfews during weekends & night etc. completely stalled / disrupted loss control activities of the Company resulting into higher theft and T & D losses. Gautam Buddha Nagar district covering Noida & Greater Noida was amongst highest reporting COVID-19 infection resulting in to severe restriction / disruption in work. Even, during November, 2020 sudden spurt of COVID-19 again pushed back the momentum somewhat gained in previous 2-3 month.

4.4.2 The Petitioner submitted that due to COVID-19, the industrial, commercial and institutional load was severely impacted whereas domestic load both in rural and urban areas increased significantly resulting in significant change in the consumption mix i.e., much lower HT sales, higher LT sales and higher T & D losses.

4.4.3 The Petitioner submitted that they had already accomplished the economically achievable level of loss reduction despite numerous challenges. The Distribution System of the Company consists of 33 kV lines, 11 kV lines and 400 Volts lines across its licensed area spreading over 335 sq kms. The technical losses itself involved in the transformation and wheeling/ conveyance of power contributes major part of the loss level of 8% and such technical losses are going up with addition of more transformers and LT distribution network. Even, the cost benefit analysis does not support more capital investments especially for reducing the technical losses.

4.4.4 The Petitioner further submitted that the Commission is empowered under Regulation 56 of the MYT Regulations, 2019 i.e., “Power to remove difficulties” to approve T & D losses at 8.39% as against T & D Loss of 7.92% approved vide MYT Order dated November 26, 2020 considering the adverse impact on the operations of the Company due COVID -19 pandemic as explained above.

4.4.5 The Petitioner requested the Commission to approve the T & D Losses on actuals. The summary of Energy Balance as per Audited Accounts for FY 2020-21 are as summarized in Table below:

TABLE 4-6: ENERGY BALANCE AND DISTRIBUTION LOSS AS SUBMITTED BY THE PETITIONER FOR FY 2020-21

Particulars	U.o.M	Formula	Approved	Actual
Energy Purchase	MU	a	2,175.23	2,196.36
Distribution Losses	MU	b	172.28	184.31
	%	c=b/a	7.92%	8.39%
Energy Sales	MU	d=a-c	2,002.95	2,012.05

4.4.6 The Petitioner requested the Commission to consider and allow the marginal increase in losses as claimed by the Company and approve the actual quantum of power purchase of 2,196.36 MU for FY 2020-21.

Commission's Analysis

4.4.7 The Commission observed that as per Monthly Energy Account submitted by UPPTCL, the Energy Drawl at Distribution Periphery for Petitioner is 2187.61 MU and the Intra-State Transmission Losses as 3.37% for FY 2020-21. However, the Petitioner has claimed Energy Drawl at Distribution Periphery as 2196.36 MU and the Intra-State Transmission losses of 3.48% in its petition for Truing-up for FY 2020-21. The Commission sought justification and reconciliation for the same. The Commission further sought reasons as to why the values provided by UPPTCL in its Monthly Energy Account may not be considered while truing up for FY 2020-21.

4.4.8 In reply, the Petitioner submitted that the energy import of 2,196.36 MU as mentioned in Form F-13(i) of Appendix-II of the Petition includes energy procured from (i) Consumers through Net-Metering (8.20 MU), Captive Solar Plants installed on the roof-top of the Company's offices & substations (0.35 MU) and (iii) LTPPA entered with GNIDA for 1 MW Solar power duly approved by the Commission (1.19 MU). Since, these 9.74 MU energy is procured from the source situated within the license area of the company i.e., Greater Noida such energy procurement need to be considered over and above the energy procured through UPPTCL's system viz. 2,186.62 MU (i.e. 2,196.36 MU -9.74 MU) to determine total energy procurement for FY 2020-21. From the above, it can be stated that the energy procurement of 2,186.62 MU is comparable with 2,187.61 MU as per Monthly Energy Account submitted by UPPTCL.

4.4.9 The Petitioner further submitted that, the Company reconciles its Energy

Procurement with data published timely by NRLDC and finalises its 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 Bus. Accordingly, during FY 2020-21, the Company has considered Intra-State transmission losses @ 3.56% for the period 01.04.2020 to 20.11.2020 based on UPPTCL's Tariff Order of FY 2019-20 dated August 27, 2019 and 3.40% from Tariff Order of FY 2020-21 dated November 21, 2021, hence the average Intra-State losses for FY 2020-21 is appearing as 3.48%.

4.4.10 Further, NPCL stated that, the Company relies on the data published by NRLDC for its energy accounting as UPSLDC had 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 data published by NRLDC.

4.4.11 The Petitioner requested the Commission to consider the Energy Import of 2,186.62 MU procured via UPPTCL's system along with 9.74 MU procured from sources within Greater Noida aggregating 2,196.36 MU for True-up of FY 2020-21 especially in view of the fact that the variation with UPPTCL's records is only 0.99 MU or 0.04% i.e. [2,187.61-2,186.62]/(2,187.61)].

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

Quote

1. During the period of audit we found that 2504861 KWh were captively consumed by NPCL at different locations, and as per auditee they all are adjusted against sold units with zero value against sales.

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

4.4.13 The Commission inferred from the Audit Report of Independent Auditor for FY 2020-21 that 25,04,861 KWh were captively consumed by NPCL at different locations, and as per auditee they all are adjusted against sold units with zero value against sales. Therefore, the Commission finds that the actual distribution loss as claimed by the Petitioner is inclusive of the consumption of 2.50 MU consumed at different locations. The Commission also finds that in the case of State Discoms, such consumption is billed under LMV-4(A)/ HV-1 category according to Connected Load, which is the correct approach and the same must be applied to NPCL also.

4.4.14 The Commission has dealt with the said consumption of 2.50 MU in the following manner:

- The Commission has considered the consumption of 2.50 MU which is shown as captive consumption by the Licensee, because there is no such provision in the Regulations for the same, and therefore has considered as sales under LMV-4(B) category in accordance with the Rate Schedule, in addition to the actual sales as claimed by the Petitioner.
- The Commission has computed the revenue from the sale of 2.50 MU considering the approved tariff of LMV-4(B) and added the same to the actual revenue as claimed by the Petitioner, as discussed in the subsequent part of the Order.
- The Commission has considered the impact of the same in the energy balance table as given below.
- The impact of the same on distribution loss is also discussed below.

4.4.15 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.

4.4.16 The Commission in Tariff Order of FY 2020-21 dated December 04, 2020 approved the Distribution loss of 7.92% for FY 2020-21, whereas the actual Distribution losses claimed by the Petitioner is 8.39%, which is higher than the losses approved by the Commission. The Commission for the purpose of Truing Up for FY 2020-21 considers the same Distribution losses as approved in its Tariff Order of FY 2020-21 dated December 04, 2020 as shown in the table below:

TABLE 4-7: APPROVED ENERGY BALANCE FOR FY 2020-21

Particulars	**Tariff Order for FY 2020-21 dated 04.12.2020**	**True Up Petition**	**Approved**
Energy Sales (MU)	2002.95	2012.05	2014.56*
Distribution Loss %	7.92%	8.39%	7.92%
Distribution Loss including EHV losses (MU)	172.28	184.30	173.28
Energy Purchase at Discom Periphery (MU)	**2175.23**	2196.36	**2187.83**
Intra State Losses (%)	-	3.48%	3.37%
Energy at UP Periphery (MU's)		2275.53	2264.06
Inter-State Losses (%)		3.26%	3.42%^
Units at Ex-Bus (MU's)		**2352.32**	**2344.24**

** As discussed in Para. 4.4.14 for treatment of 2.50 MUs.*
*** Actual Intra-State Loss of UPPTCL (3.37%).*
^ Over-all losses remaining same and considering UPPTCL approved, inter-state losses have been recomputed accordingly only for the purpose of representation and is not the actual loss.

4.4.17 The actual loss of FY 2020-21 as submitted by the Petitioner are as under:

TABLE 4-8: ACTUAL LOSS AS SUBMITTED BY THE PETITIONER

Name of Discom	**Energy at Discom Periphery**	**Sales**	**Actual Distribution Loss**	**Distribution losses as per Tariff Order for FY 2020-21 dated 04.12.2020**	**Distribution losses claimed**
	(MU)	**(MU)**	**(%)**	**(%)**	**(%)**
NPCL	2196.36	2012.05	8.39%	7.92%	8.39%

4.4.18 As computed in previous section, it is observed that by increasing the sales of Unmetered categories (LMV-1 & LMV-5), the Petitioner has, not only claimed excess power purchase cost, but also, suppressed the actual distribution losses for the year. Taking into consideration the same, the loss computation works out as under:

TABLE 4-9: ACTUAL DISTRIBUTION LOSS COMPUTED FOR FY 2020-21

Name of Discom	Energy at Discom Periphery (MU)	Actual Distribution Loss (%)	Sales (MU)	Consumption not considered under sales (MU)	Sales (MU)	Excess Sales (MU)	Sales (MU) after reducing excess sales booked under unmetered categories	Actual distribution loss computed (%)
	A	B	C	D	E=C+D	F	G=E-F	H=1-G/A
NPCL	2196.36	8.39%	2012.05	2.50	2014.56	11.41	2003.15	8.80%

4.4.19 From the above, it is observed that the Petitioner has understated the actual distribution loss for FY 2020-21 by 0.41%.

4.5 POWER PURCHASE

Petitioner's submission

4.5.1 The Petitioner submitted during FY 2020-21, in order to meet the demand of the consumers, the company has procured 2196.36 MU at a total cost of Rs. 1157.13 Crore as against 2,175.24 MU and Rs. 962.18 Crore approved by the Commission vide its Tariff Order dated December 4, 2020 respectively. The details of actual power purchase cost are given in the following paragraphs: -

Power Procurement from LTPPA

4.5.2 The Petitioner submitted that during FY 2020-21, the company has procured more than 50% of its requirement from the Long Term Power Purchase Agreement (LTPPA) with Dhariwal Infrastructure Limited (DIL) for supply of 187 MW power (Net 170 MW Power at DIL Plant Bus after 9% Auxiliary Consumption).

4.5.3 During the FY 2020-21, M/s DIL's plant availability was 97% and based on the consumer's load profile and demand in its license area, the Company has drawn 1300.69 MU at Ex-Generation Bus and 1208.69 MU at NPCL Bus as summarised here in Table below: -

TABLE 4-10: ***DETAILS OF LONG-TERM POWER PURCHASE AS SUBMITTED BY THE PETITIONER FOR FY 2020-21***

S. No.	Description	UoM	Approved (T.O. dated. December 04. 2020)	Actual
1	Contracted Quantum at ex-DIL	MW	170	170
2	No of Days	-	365	365
3	Hours	-	24	24

S. No.	Description	UoM	Approved (T.O. dated. December 04. 2020)	Actual
4	Normative Availability	%	-	85%
5	Estimated /Actual Available Capacity	%	80%	97%
6	**Units at Normative Availability**	**MU**	**-**	**1267.09**
7	**Units at Ex-Bus**	**MU**	**1198.23**	**1300.69**
8	Inter-State Losses	%	3.90%	3.70%
9	Units at UP Periphery	MU	1151.50	1252.50
10	Intra-State Losses	%	3.40%	3.50%
11	**Units at NPCL**	**MU**	**1112.35**	**1208.69**
12	Fixed Cost	Rs.Cr.	218.79	233.16
13	Variable Cost*	Rs.Cr.	207.27	377.08
14	Inter-State Trans. Charges	Rs.Cr.	70.45	73.17
15	Intra-State Trans. Charges	Rs.Cr.	26.45	24.86
16	**Subtotal**	**Rs.Cr.**	**522.95**	**708.27**
17	***Add: Cash Discount availed by Petitioner in FY 2020-21 but considered by the Commission in FY 2019-20***	**Rs. Cr.**	**-**	**0.79**
18	***Total Cost#***	**Rs. Cr.**	**522.95**	**709.06**
** Includes Arrears of change in law & Additional coal from FY 19-20 to 20-21*				

4.5.4 The Petitioner has submitted that the Regulations 24 (a) & 26(i) of UPERC Generation Tariff Regulations, 2019 provides the methodology for payment of Fixed Charges under Long-term Power Purchase Agreement as 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

4.5.5 The Petitioner submitted that the 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 terms of the LTPPA with DIL approved by the Commission vide 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

4.5.6 Further, Regulation 35 of the Generation Tariff Regulations, 2019 provides for payment of Incentive to Genco based on NAPAF and actual scheduled energy. The extract of relevant regulations is reproduced below:

Quote

> ***35 Incentive:***
>
> *…Incentive to all thermal power stations, shall be payable at a flat rate of 65 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to target plant load factor….*

Unquote

4.5.7 The Petitioner has submitted that during the FY 2020-21, actual plant availability of M/s DIL was at 97%, accordingly, it raised bills for full fixed cost @ 85% NAPAF and also for incentive for actual Generation as the same was above 85% which has been duly considered in the Audited Annual Accounts for FY 2020-21.

4.5.8 The Petitioner submitted that the Commission in its Order dated February 05, 2019, approved the said provisional tariff of Fixed cost of Rs. 1.90 /kWh and Variable cost of Rs. 1.80 /kWh exclusive of the Point of Connection [“PoC”] charges and losses. Also, while approving the aforesaid tariffs, the same was computed at a normative availability of 85% of the Generation Plant. Accordingly, the same has been paid.

4.5.9 In this regard, the Commission while approving the ARR of FY 2020-21 vide Order dated December 04, 2020 approved the fixed charges on the basis of projected energy drawn @ 80 % whereas the Company is required to make full payment of fixed charges on the basis of Normative Plant Availability @ 85% in accordance with the MYT Generation Regulations, 2014 in Tariff Order of DIL dated February 05, 2019 for M/s DIL and the provisions of approved PPA. Further, while approving the fixed and energy charges, the Commission has computed the same on the basis of energy drawn at UP-periphery instead of the units drawn at Generation-Bus. Such allowance of Fixed Charges / Energy Charges at U.P. Periphery is in complete contradiction to MYT Generation Regulations, 2014 in Tariff Order dated February 05, 2019 for M/s DIL, which is evident from Para-4.2.6, 4.2.9, 4.2.10 & 4.2.12 of the DIL's Tariff Order dated February 05, 2019 as 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-1: 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 follows:

TABLE-2: 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… (emphasis supplied)*

Unquote

4.5.10 The Commission has approved the levelized tariff after aggregating the PoC charges and losses over and above the tariff of Rs. 1.87 Per unit (Levelised Fixed Cost) and Rs. 2.21 per unit (Levelised Variable Charges) in order to arrive at the cost at the delivery point.

4.5.11 The Petitioner submitted that apart from fixed cost and incentive, M/s DIL also raised bills towards the other following components: -

a) Energy charges after considering the CERC escalation as per Tariff Order dated February 05, 2019.
b) Additional coal for FY 2020-21 in line with Order dated May 06, 2020 in Petition No. 1438 of 2019.
c) Change in Law for FY 2019-20 and FY 2020-21 in line with Order dated May 29, 2020 in Petition No. 1440 of 2019.

4.5.12 The Petitioner submitted that the company has duly considered all the above-referred cost in its Audited Accounts and has claimed the same in its true-up petition.

4.5.13 The Petitioner submitted that it has incurred the above expenses in compliance of the relevant Regulations, Orders and PPA which have been duly approved by the Commission, the Petitioner requested the Commission to approve the same as claimed.

Power Purchase from Medium Term Sources:

4.5.14 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:

TABLE 4-11: MTPPA AS SUBMITTED BY THE PETITIONER

Vendor	Source	Capacity	Duration	Period	Nature
APPCPL	DoP, GoAP	50 MW	RTC	Apr-Sep	Large Hydro
		25MW	4 Hrs	Oct-Nov	
		25MW	2 Hrs	Dec-Mar	
	DoP, GoN	25 MW	RTC	Apr-Sep	
		25MW	4 Hrs	Oct-Nov	
		25MW	2 Hrs	Dec-Mar	

4.5.15 The Petitioner submitted that the tariff discovered through bidding i.e., Rs. 5.46 per unit landed at NPCL Bus based on then prevailing transmission charges and losses, was duly approved by Commission vide Order 28.02.2020 along with respective medium-term power purchase agreements.

4.5.16 The Petitioner submitted that the above tariff was based on 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

4.5.17 The Petitioner submitted that based on the applicable transmission charges and losses for Inter-State and Intra-State Transmission Utilities, the Company procured 294.25 MU power in aggregate through above sources at landed cost of Rs 4.99/kWh and Rs. 4.93/kWh respectively as summarised below in Tables: -

TABLE 4-12: DETAILS OF MEDIUM-TERM POWER PURCHASE COST FROM M/S APPCPL AS SUBMITTED BY THE PETITIONER FOR TRUE UP OF FY 2020-21

S. No.	Description	UoM	Approved (T.O. dated 04.12.2020)	Actual
1	Contracted Quantum at NPCL			
	a. Apr-Sep for 24 Hrs. i.e., 183 Days	MW	50	50
	b. Oct-Nov for 04 Hrs. i.e. 61 Days	MW	25	25

S. No.	Description	UoM	Approved (T.O. dated 04.12.2020)	Actual
	c. Dec-Mar for 02 Hrs. i.e., 121 Days	MW	25	25
2	No of Days		365	365
3	No of Hours			
	a. 00:24 hrs from Apr-Sep	Hrs	24	24
	b. 18:22 hrs from Oct-Nov	Hrs	4	4
	c. 18:20 hrs from Dec-Mar	Hrs	2	2
4	Normative Availability	%	-	85%
5	**Units at Normative Availability**	**MU**	**-**	**196.99**
6	Utilisation of Capacity	%	-	94%
7	**Units at Ex-Bus**	**MU**	**186.13**	**212.42**
8	Inter-State Losses	%	2.83%	3.18%
9	Units at UP Periphery	MU	180.87	205.68
10	Intra-State Losses	%	3.40%	3.56%
11	**Units at NPCL**	**MU**	**174.72**	**198.36**
12	Fixed Cost	Rs.Cr.	38.90	37.09
13	Variable Cost	Rs.Cr.	38.90	49.70
14	Inter-State Trans. Charges	Rs.Cr.	12.17	8.28
15	Intra-State Trans. Charges	Rs.Cr.	4.15	3.96
16	**Total Cost#**	**Rs.Cr.**	**94.12**	**99.03**
17	**Landed Rate**	**Rs. kWh**	**5.39**	**4.99**
# Total may not tally due to rounding offs				

TABLE 4-13: DETAILS OF MEDIUM-TERM POWER PURCHASE COST FROM M/S APPCPL AS SUBMITTED BY THE PETITIONER FOR TRUE UP OF FY 2020-21

S. No.	Description	UoM	Approved (T.O. dated 04.12.2020)	Actual
1	Contracted Quantum at NPCL			
	a. Apr-Sep for 24 Hrs i.e. 183 Days	MW	25	25
	b. Oct-Nov for 04 Hrs i.e. 61 Days	MW	25	25
	c. Dec-Mar for 02 Hrs i.e. 121 Days	MW	25	25
2	No of Days		365	365
3	No of Hours			
	a. 00:24 hrs from Apr-Sep	Hrs	24	24
	b. 18:22 hrs from Oct-Nov	Hrs	4	4
	c. 18:20 hrs from Dec-Mar	Hrs	2	2
4	Normative Availability	%	-	85%
5	***Units at Normative Availability***	**MU**	**-**	**103.66**
6	Utilisation of Available Capacity	%	-	92%
7	***Units at Ex-Bus***	**MU**	**88.83**	**102.23**
8	Inter-State Losses	%	3.27%	2.75%
9	Units at UP Periphery	MU	85.93	99.42
10	Intra-State Losses	%	3.40%	3.55%
11	***Units at NPCL***	**MU**	**83.01**	**95.89**
12	Fixed Cost	Rs.Cr.	18.52	18.31
13	Variable Cost	Rs.Cr.	18.52	23.44
14	Inter-State Trans. Charges	Rs.Cr.	6.31	3.62

S. No.	Description	UoM	Approved (T.O. dated 04.12.2020)	Actual
15	Intra-State Trans. Charges	Rs.Cr.	1.97	1.94
16	***Total Cost***[#]	**Rs.Cr.**	**45.32**	**47.31**
17	***Landed Rate***	**Rs. kWh**	**5.46**	**4.93**
[#] *Total may not tally due to rounding offs*				

4.5.18 The Petitioner submitted that as per Article 11.4.2 of approved Medium-Term Agreements with M/s APPCPL, full fixed charges are to be paid if the actual availability of the plant is more than Normative Availability (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.

4.5.19 The Petitioner submitted that the actual availability for above power were at 94% and 92%, apart from considering full fixed charges @ 85%, the Company has also considered Incentive corresponding to energy procured beyond 85% Normative Availability.

4.5.20 The Petitioner in its earlier Petition before the Commission has already submitted that M/s PTC who had supplied 100 MW power to the Company from December 01, 2018 to March 31, 2020 has claimed additional expenditure towards reimbursement of electricity duty, taxes etc. during FY 2018-19 and FY 2019-20. Similar claim for Rs. 1.38 Crore has been received by the Company from M/s PTC during FY 2020-21, which has been considered in the PPC from MTPPA during FY 2020-21. M/s PTC has filed a Petition No 268/MP/2020 before the CERC claiming above amount.

Power Procurement for Short-Term Sources:

4.5.21 The Petitioner has submitted that during FY 2020-21, 561.32 MU power was purchased from short term sources as detailed below:

TABLE 4-14**: *DETAILS OF SHORT TERM AND BANKING POWER AS SUBMITTED BY THE PETITIONER FOR FY 2020-21***

Description	Approved (T.O. dated 04.12.2020)			Actual		
	Units (MU)	Rate/ kWh	Amount (Rs. Crore)	Units (MU)	Rate/ kWh	Amount (Rs. Crore)
Power Exchange	399.42	3.28	131.14	461.16	3.78	174.35
DB Power	43.39	4.88	21.18	84.09	4.84	40.69
Adani Power	4.89	4.49	2.20	14.91	4.49	6.69
Power Banking	-	-	-	1.16	0.50	0.06
Total	**447.69**	**3.45**	**154.51**	**561.32**	**3.95**	**221.79**
**Total may not tally due to rounding offs*						

4.5.22 The Petitioner submitted that PPAs in respect of power purchase from M/s D B Power and M/s Adani Power (through M/s APPCPL) along with the tariff discovered on DEEP Portal were approved by the Commission vide its Order dated March 05, 2020.

4.5.23 Further, the Company has received 1.16 MU power banked during FY 2019-20.

Power Procurement from Renewable Sources:

4.5.24 The Petitioner has submitted that during FY 2020-21, the Company procured 123.51 MU power from long-term and short-term renewable sources.

4.5.25 The Petitioner submitted that 1.19 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 Commission vide Order dated July 14, 2015.

4.5.26 The Petitioner submitted that 27.70 MU @ Rs 3.78 per kWh was procured from Long Term Power Purchase Agreement for 10 MW Wind power with PTC India Limited signed on June 27, 2017 duly approved by Commission vide Order Dated January 05, 2018.

4.5.27 The Petitioner submitted that 8.20 MU @ Rs 8.05 per kWh was procured from Net-Metered consumers having Net-Metering agreements for around 24 MW solar power.

4.5.28 The Petitioner submitted that in order to meet its RPO obligation the company 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 Rooftops of its 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 Limited (SECI). Accordingly, the Company vide its letter no. P-77A/ 249 dated October 27, 2016 submitted to the Commission that 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 Company 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 Commission for fulfilment of RPO Obligations by DISCOMs in UP. Further, aforesaid power procurement was also duly approved by Commission while approving the Business Plan vide 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 for FY 2016-17, FY 2017-18 and FY 2018-19 vide Tariff Orders dated January 22, 2019, September 03, 2019 and December 04, 2020 respectively. During FY 2020-21, the Company procured 0.35 MU @ Rs. 5.54/ kWh, which is around the blanket rate approved for procurement of Renewable Energy power of Rs. 5.46/kWh approved vide Tariff Order dated September 03, 2019 while approving the ARR for FY 2019-20.

4.5.29 The Petitioner submitted that in order to meet the RPO trajectory for FY 2020-21, the Company has procured 12.46 MU @ Rs 3.99 per kWh from Exchange RE-Solar and 6.70 MU @ Rs 5.06 per kWh from Exchange RE Non - Solar Market.

4.5.30 The Petitioner submitted that 66.92 MU @ Rs 4.76 per kWh was procured through Short-Term Power Purchase Agreement with M/s Kreate Energy (I) Private Limited (Source: Energy & Power Department, Govt. of Sikkim) from May'20 to September'20 to meet HPO as per the directions of the Commission. The above power was procured from M/s Kreate through competitive bidding invited by Energy & Power Department, Govt. of Sikkim. Further, the cost of aforesaid power is lower than the cost of non-solar power procured from Exchange (RE).

4.5.31 Based on above, summary of renewable power purchase during FY 2020-21 is provided in Table below: -

TABLE 4-15*: *RENEWABLE POWER AS SUBMITTED BY THE PETITIONER FOR FY 2020-21

Description	**Approved (T.O. 04.12.2020)**			**Actual**		
	Units (MU)	**Rate/ kWh**	**Amount (Rs. Crore)**	**Units (MU)**	**Rate/ kWh**	**Amount (Rs. Crore)**
GNIDA – Solar	1.58	7.06	1.11	1.19	6.92	0.82
PTC - Wind	30.46	3.89	11.86	27.70	3.78	10.48
APPCPL Roof-Top Solar	-	-	-	0.35	5.54	0.19
Exchange RE -Solar	-	-	-	12.46	3.99	4.97
Exchange RE -Non-Solar	-	-	-	6.70	5.06	3.39
Kreate (HPO)	-	-	-	66.92	4.76	31.82
Net Metering	-	-	-	8.20	8.05	6.60
Excess RPO	325.42	4.07	132.30	-	-	-
Total RE Power	357.46	4.06	145.27	123.51	4.72	58.28

4.5.32 The Petitioner submitted the status of RPO computed in accordance with RPO Regulations as shown below: -

TABLE 4-16: RPO STATUS AS SUBMITTED BY THE PETITIONER FOR FY 2020-21

RE Power	**Opening Unfulfilled Obligation**	**Obligation for the year**	**Obligation estimated to be met during the year***	**Balance Obligation Carried Forward**
	a	**B**	**c**	**d=a+b-c**
Solar	44.29	51.53	51.21	44.62
Non-Solar	71.85	103.07	34.40	140.52
Hydro Power	19.85	34.36	66.92	(12.71)
Total	135.99	188.96	152.52	172.42
** Including gross generation under net-metering arrangements.*				

4.5.33 The Petitioner submitted that based on the Audited Accounts for FY 2020-21, the actual Power Purchase Cost for FY 2020-21 vis-à-vis provisionally approved by the Commission vide Tariff Order of FY 2020-21 dated December 04, 2020, is shown in table below: -

TABLE 4-17: TOTAL POWER PURCHASE COST AS SUBMITTED BY THE PETITIONER FOR FY 2020-21

Sl. No	Item	Approved (T.O. dated 04.12.2020)			Claimed in True-Up		
	Source of Power Purchase	MU's	Rs./kWh	Amount (Rs. Crore)	MU's	Rs./kWh	Amount (Rs. Crore)
1	Long Term	1,112.35	4.70	522.95	1,208.69	5.79	700.13
2	Change in Law and Additional Coal	-	-	-	-	-	8.93
3	Medium Term	257.73	5.41	139.44	294.25	4.97	146.35
4	Additional claim by SKS						1.38
5	Short Term	447.69	3.45	154.51	561.32	3.95	221.79
6	Renewable Energy	357.46	4.06	145.27	123.51	4.72	58.28
7	UI/Sale	-	-	-	8.58	7.09	6.08
8	UPPTCL True-up Arrear (FY 2017-18 & FY 2018-19) as per UPPTCL Tariff Order dated 10.11.2020	-	-	-	-	-	14.07
9	Other UPSLDC Application Fees	-	-	-	-	-	0.12
10	**Total Power Purchase Cost (Rs. Cr.)**	**2,175.23**	**4.42**	**962.18**	**2,196.36**	**5.27**	**1,157.13**

4.5.34 The Petitioner submitted that the total Power Purchase Cost considered for True-up is Rs. 1,157.13 Crore which includes Inter-State and Intra-State Transmission charges of Rs. 154.37 Crore including True-up arrears of UPPTCL for the period FY 2017-18 and FY 2018-19 amounting to Rs 14.07 Crore as per UPPTCL's Tariff Order dated November 10, 2020.

Commission's Analysis

4.5.35 Based on the Trued-Up Energy Balance for FY 2020-21, the power purchase requirement for FY 2020-21 has been worked out as 2,187.83 MU at NPCL Periphery.

4.5.36 The Commission observed that the Petitioner has claimed total power purchase cost of Rs. 1,157.13 Crore, (including transmission Charges of Rs. 154.37 Crore) whereas, as per Note 30 of the Audited Accounts the same is Rs. 1156.98 Crore (including transmission charges of Rs. 139.51 Crore). The Petitioner was directed to justify the difference and reconcile with the audited accounts. In reply, the Petitioner submitted as under:

Quote

As the Hon'ble Commission is kindly aware, that medium term PPA with M/s APPCPL for supply of 75 MW from 1st Apr 2020 to 31st March 2023 duly approved by the Hon'ble Commission vide order dated 28th Feb, 2020 was *inclusive of Inter-state and Intra State Transmission charges for which payment was being made to M/s APPCPL. Thus, in the audited accounts, the Power purchase cost is inclusive of Inter-state & Intra- State Transmission charges paid to PGCIL & UPPTCL.*

While, in the Tariff formats, for the purpose of better understanding and comparison amongst the various sources of power, the inter-state Transmission charges of Rs. 14.92 Cr are segregated from energy cost and included under the inter-state transmission charges separately. It may be seen that in both the documents, the total power purchase cost including Transmission charges are same. Hence, it is only a matter of presentation of information and there is no difference in the total power purchase cost.

Apart from above, the Company in its True-up petition for FY 2020-21 has considered the Power Banking transaction during FY 2020-21 as cost neutral same as being done in True-up petition for FY 2019-20, therefore, 1.16 MU (inclusive of Premium Units) Energy procured against the power banked in FY 2019-20, valued at Rs. 0.64 Cr in Audited Accounts for FY 2020-21, has been considered at Nil value in Power Purchase Cost in the True-up Petition for FY 2020-21.

Further, since the Hon'ble Commission in its Tariff Order dated 26th August, 2021 while Truing-up Power Purchase Cost for FY 2019-20 has considered the cash discount on additional Coal for FY 2019-20 and change in law from FY 2016-17 to FY 2018-19 even though the same was availed by the Company in FY 2020-21, therefore, the Company has not included such rebate in its True-up ARR for FY 2020-21.

Accordingly, the reconciliation of Power Purchase Cost as desired is provided here-in-below: -

Table-1 : Reconciliation of Power Purchase Cost (FY 2020-21)

Table-1 : Reconciliation of Power Purchase Cost (FY 2020-21)
(Rs. Cr.)

Sl. No.	*Particulars*	*Ref.*	*Amount*
1	***PPC as per Audited A/c***	***a***	***1,156.98***
2	*Power Banking (being considered at Nil in ARR being barter transaction)*	*b*	*(0.64)*
3	*Rebate on Additional Claim of M/s DIL (Already considered by Hon'ble Commission true up for FY 19-20)*	*c*	*0.79*
4	***PPC as per True up Petition***	***d=a+b+c***	***1,157.13***

Unquote

4.5.37 The Commission directed the Petitioner to submit the auditor's certificate depicting energy purchased from each source (ex-bus) and at NPCL periphery for FY 2020-21. The Petitioner submitted the details of power purchase containing source-wise details of power procured from delivery point to NPCL-Bus duly certified by Chartered Accountant. In compliance to above said query of the Commission, the Petitioner has submitted the copies of bills raised by PGCIL.

4.5.38 For each source of power purchase claimed, the Commission directed the Petitioner to submit the copies of all the PPAs and the approval of the Commission accorded through its Orders. The Petitioner submitted the approvals of some of the sources that have been claimed whereas in case of certain sources, no approvals has been given by the Commission. Taking this into consideration, analysis and appropriate treatment has been done. Therefore, the Commission has considered each source individually and any balance that is left after fulfilling the power purchase requirement has been dealt separately.

Power Procurement from Long Term Sources

4.5.39 The Petitioner submitted that it has procured 1300.69 MU (Ex-Bus) from DIL for which the total cost claimed is Rs. 709.06 Crore (including transmission). The details of power purchase from Long Term source as claimed by NPCL for FY 2020-21 is shown in the Table below:

TABLE 4-18: POWER PURCHASE FROM LONG TERM SOURCE (DIL) FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER (RS. CRORE)

Source	**MU at Ex-bus**	**Inter State Loss (%)**	**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)**
DIL	1300.69	3.70%	3.50%	1208.96	233.16	368.94	602.10	73.17	24.86	98.03	700.13	5.79
Additional Coal Charges FY 2020-21 (A)	-	-	-	-	-	-	0.41	-	-	-	0.41	-
For Change in Law (FY 2019-20 to FY 2020-21) (B)	-	-	-	-	-	-	8.52	-	-	-	8.52	-
Total Arrears (DIL) (A+B)	-	-	-	-	-	-	8.93	-	-	-	8.93	-

4.5.40 The Petitioner has claimed the availability for FY 2020-21 as 97%. The Commission directed the Petitioner to submit the availability certificate issued by Uttar Pradesh Load Despatch Centre (UPSLDC). In reply to the above, the Petitioner submitted as under:

Quote

> *It is submitted that, the Company has procured long term and medium-term power from DIL and APPCPL in FY 2020-21. The respective Regional Load Despatch Centre or Regional Agency issues certificate only for actual energy drawn and not for the availability declared by Generating Plant viz. M/s DIL and / or other generating Plants. Accordingly, for compliance of PPA's terms, the Plant Availability are considered as declared by the Generator and as provided in the Invoice duly verified by the Company, while actual drawl is computed from the information published by respective Regional Load Despatch Centre or Regional Agency.*
>
> *The details of Plant availability via-via actual drawl is provided in the below table.*

Table-2 : Plant Availability and actual drawl under LTPPA with DIL

Plants	***Plant Availability***		***Actual Drawl***	
	MU	***%***	***MU***	***%***
DIL	*1450.53*	***97.40%***	*1300.69*	*87.34%*
APPCPL (Source- GoAP)	*203.85*	*96.67%*	*198.36*	***94.07%***
APPCPL (Source- GoN)	*101.08*	*96.86%*	*95.89*	***91.88%***

Unquote

4.5.41 The Petitioner submitted that incentive for LTPPA with M/s DIL, has been claimed in accordance with Regulation 35 of UPERC (Terms and Conditions of Generation Tariff) Regulations 2019, as reproduced below:

Quote

35. Incentive

Incentives to all thermal power stations, shall be payable at a flat rate of 65 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to target plant load factor.

Unquote

4.5.42 Accordingly, the calculation of incentive in respect of LTPPA for FY 2020-21 is provided in Table below:

TABLE 4-19: INCENTIVE COMPUTATION FOR DIL FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER

S. No	Particulars	U.o.M.	Ref.	DIL
1	Normative Availability	MUs	a	1265.82
2		%	b	85%
3	Actual Dispatch	MUs	c	1300.69
4		%	d	87%
5	Incentives units	MUs	e=c-a	34.87
6	Incentives Rate as per Gen. Regulation	Rs./kWh	f	0.65
7	**Incentives Amount**	**Rs. Cr.**	**g=e*f/10**	**2.27**

4.5.43 The Commission vide its Order dated November 22, 2021 approved the True-Up for DIL for FY 2016-17 to FY 2018-19. The relevant extract is reproduced below:

Quote

2.5.1 Based on the discussion made above, the true-up ARR and Generation Tariff for the tariff period FY 2016-19 for supply of power from Unit 2 of DIL's Project to NPCL as approved by this Commission is shown as below:

TABLE 23: Summary of Trued-up Annual Revenue Requirement and Generation Tariff for FY 2016-19 (excluding claims due to procurement and use of Additional Coal and Change in Law events)

Particulars	*UoM*	*FY 2016-17*	*FY 2017-18*	*FY 2018-19*
Operationalized Contracted Capacity (Gross)	*MW*	*41*	*187*	*187*
Normative Auxiliary Power Consumption	*%*	*9.00%*	*9.00%*	*9.00%*

Normative Annual Power Consumption	*%*	*85.00%*	*85.00%*	*85.00%*
Operationalized Contracted Capacity (Net)	*MW*	*37*	*170*	*170*
Generation at NAPAF (85%)	*MUs*	*101.27*	*1265.82*	*1265.82*
Approved per unit Fixed Charges (MYT order)	***₹ / kWh***	***2.05***	***1.99***	***1.90***
Annual Fixed Charges as approved by the Commission for Operationalized Contracted Capacity for NPCL	*₹ Crores*	*20.76*	*251.90*	*240.51*
Incremental Annual Fixed Charges for Operationalized Contracted Capacity for NPCL	*₹ Crores*	*0.02*	*1.58*	*2.77*
Trued-Up Annual Fixed Charges for Operationalized Contracted Capacity for NPCL	***₹ Crores***	***20.78***	***253.48***	***243.28***
Trued-Up ex-bus Fixed Charge Rate at NAPAF	***₹ / kWh***	***2.05***	***2.00***	***1.92***
Scheduled Generation (Ex-bus)	*MUs*	*100.67*	*1176.26*	*1175.37*
Energy Charges as approved by the Commission @ CERC esc. rate and GCV @4150 Kcal/Kg	***₹ / kWh***	***1.65***	***1.72***	***1.80***
Energy Charges considering application Escalation Indices and actual as Received GCV of Coal	***₹ / kWh***	***1.706***	***1.994***	***2.193***
Energy Charges considering application Escalation Indices and actual as Received GCV of Coal	*₹ Crores*	*17.17*	*234.49*	*257.73*
Debit/credit claimed /received based on CIMFR report for FSA Grade Coal	***₹ Crores***	***-***	***-0.38***	***-0.26***
Efficiency gain benefit passed on to NPCL	***₹ Crores***	***-***	***-0.95***	***-1.68***
Trued-up ex-bus Energy Charges *(excluding claims due to procurement & use of Additional Coal and Change in Law events)*	***₹ Cores***	***17.17***	***233.16***	***255.79***
Trued-up ex-bus Energy Charge Rate at Scheduled Generation *(excluding claims due to procurement & use of Additional Coal and Change in Law events)*	***₹ kWh***	***1.706***	***1.982***	***2.177***
Total Trued-up Annual Revenue Requirement for FY 2016-19 for supply to NPCL (excluding claims due to procurement & use of Additional Coal and Change in Law events)	***₹ Crores***	***37.95***	***486.64***	***499.07***
Trued-up ex-bus Generation Tariff for supply to NPCL	***₹ / kWh***	***3.770***	***4.137***	***4.246***

It is clarified that this does not claim allowable to DIL on account of procurement of additional coal and Change in Law, in respect of which the Commission has already passed Orders on 19.03.2020 and 29.05.2020 respectively.

Unquote

4.5.44 The Commission for the True Up for FY 2020-21 has not considered the rates (Fixed Charges and Energy Charges) claimed by the Petitioner. Since, the True-Up of DIL for FY 2020-21 is yet to be finalized, the Commission has considered the latest available True-Up tariff of DIL i.e., for FY 2018-19. The Commission has considered the Ex-Bus Fixed Charges as Rs. 1.92/kWh and Ex-Bus Energy Charges as Rs. 2.177/kWh as approved in True-Up Order dated November 22, 2021 (Petition No. 1500 of 2019), while Truing-Up for FY 2020-21. Once the true-up of DIL for FY 2020-21 is approved by Commission, the impact of true-up of DIL for the respective year shall be considered and allowed to NPCL in the future years ARR/Tariff Order, as and when it happens. Taking into consideration the above rates, the Commission has computed the following long term power purchase:

TABLE 4-20-POWER PURCHASE FROM LONG TERM SOURCE (DIL) FOR FY 2020-21 COMPUTED BY THE COMMISSION (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	1300.69	3.83%	3.37%	1208.69	249.73	283.16	532.89	73.17	24.86	98.03	630.92	5.22

4.5.45 Further, the Commission has considered lower of the two values viz., claimed vs computed for each of the components of tariff for approval of procurement of power purchase from DIL for FY 2020-21.

4.5.46 The Commission observed that the Petitioner has claimed Rs. 0.41 Crore, Rs. 3.66 Crore and Rs. 4.86 Crore towards additional coal cost for FY 2020-21, Change in Law for FY 2019-20 and Change in Law for FY 2020-21 respectively. The Commission vide deficiency letter dated December 31, 2021 sought the relevant Orders along with the bills, payment vouchers and details of any prompt payment rebates availed for the same along with penalties, if any. In reply to Commission's query, the Petitioner submitted the details for claim of Rs. 0.41 Crore, Rs. 3.66 Crore and Rs. 4.86 Crore towards additional coal cost for FY 2020-21, Change in Law for FY 2020-21 and Change in Law for FY 2020-21 respectively as shown below:

TABLE 4-21: SUMMARY OF ADDITIONAL CHARGES AS SUBMITTED BY THE PETITIONER (RS. CRORE)

Particulars	Order details		DIL Bill Details				
	Ref.	Amount	Date	Amount	Rebate	Net	Payment date (Last)
Change in Law for FY 2019-20	**Order dt. 29-05-20 in Petition no. 1440 of 2019**	**3.66**	**07-08-2020**	**3.66**	**-**	**3.66**	**05-10-2020**
Change in Law for Apr'20-Sep'20	Order dt. 29-05-20 in Petition no. 1440 of 2019	2.22	04-02-2021	2.22	0.04	2.17	23-02-2021
Change in Law for Oct'20-Mar'21	Order dt. 29-05-20 in Petition no. 1440 of 2019	2.69	04-05-2021	2.69	-	2.69	11-05-2021
Change in Law for FY 2020-21 (Subtotal)	-	**4.90**	-	**4.90**	**0.04**	**4.86**	
Additional Coal for Apr'20-Sep'20	Order dt. 06-05-20 in Petition no. 1438 of 2019	-0.63	04-02-2021	-0.63	-	-0.63	23-02-2021
Additional Coal for Oct'20-Mar'21	Order dt. 06-05-20 in Petition no. 1438 of 2019	1.04	04-05-2021	1.04	-	1.04	11-05-2021
Additional Coal for FY 2020-21 (Subtotal)	-	**0.41**	-	**0.41**	**-**	**0.41**	**-**
Total	-	**8.97**	-	**8.97**	**0.04**	**8.93**	-

4.5.47 In the True-up of FY 2019-20, the Petitioner had claimed additional coal cost for FY 2019-20. The Commission has taken the following view in regard to the above in the true up of FY 2019-20:

Quote

> *Accordingly, since in the instant petition is for True-up of FY 2019-20, the additional coal cost for FY 2019-20 shall be allowed to NPCL, when the Commission does True-up of FY 2019-20 for additional coal to DIL. Accordingly, the additional coal cost claimed for FY 2019-20 is not approved in this order and NPCL can approach the Commission when the same is approved for DIL.*

Unquote

4.5.48 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.

4.5.49 The Petitioner has also submitted PoC bills for power procurement from M/s DIL and in some of the bills, credit available to the Petitioner is mentioned. For example, in reimbursement of PoC Bill having invoice NPCL/POC20-21/03, a credit available of Rs. (6.91) Crore is mentioned by the Petitioner. The Commission vide deficiency letter dated April 26,2022 sought the details of the same. In reply, the Petitioner submitted that the above-referred credit of Rs. (6.91) Crore is part of the refund of additional LTA charges by PGCIL vide its letter no. POWERGRID/WR01/Comml/Serial No. 91302869 dated January 01, 2020 with respect to HVDC charges pertaining to Champa-Kurukshetra Pole-1 line. The same has already been accounted for by the Company on accrual basis in FY 2019-20 and correspondingly credited in the ARR for FY 2019-20. The Commission had also verified the same in detail and, thereafter, considered the said credit /refund in true-up of FY 2019-20. The relevant extract of the Tariff Order dated August 26, 2021, is as under:

Quote

> *As per LTPPA with M/s DIL for supply of 170 MW power, LTA has been granted by PGCIL (CTU) in two parts, viz., 58 MW in existing system and the balance 112 MW in Champa-Kurukshetra Pole-1. Accordingly, the PoC bills for applicable transmission charges were raised by PGCIL to DIL (being the long-term applicant) on monthly basis. The monthly amount, so billed, was reimbursed by NPCL as per the terms of the LTPPA.*
>
> *From November 2018 onwards, PGCIL also started raising monthly PoC bills for 170 MW LTA from Existing line in addition to 112 MW from Champa-Kurukshetra line which resulted into higher PoC bill than the previous average monthly bill in accordance with CERC Order dated 22.02.2018 in Petition No. 13/TT/2017 determining HVDC charges pertaining to Champa-Kurukshetra Pole-1 line. As per the aforesaid Order, Hon'ble CERC approved sharing of HVDC charges for Champa-Kurukshetra Pole-1 line as per Regulation 11 (4)(3)(iii) instead of 11 (4)(3)(i) of the Sharing Regulations 2010.*

Subsequently, on the Review Petition filed by PGCIL & Other beneficiaries on the above erroneous treatment of sharing of HVDC transmission charges under Regulation 11(4)(3)(iii) instead of 11(4)(3)(i) of Sharing Regulations 2010, the Hon'ble CERC vide its Order dated 31.07.2019 allowed the above Review Petition and directed PGCIL to refund the excess LTA charges to the beneficiaries. Accordingly, in pursuance to the CERC's order dated 31.07.2019, during FY 2019-20, PGCIL credited the refund of additional LTA charges vide its letter no. POWERGRID/WR01/Comml/Serial No. 91302869 dated 01.01.2020 (copy enclosed as Annexure-4 in PDF format soft copy) which has been credited in the ARR for FY 2019-20 by the Company after receiving the credit of the same from M/s DIL.

Further, M/s PGCIL has not provided the breakup of amount reversed/refunded by it between FY 2018-19 and FY 2019-20. Therefore, it will not be feasible for the Company to provide the break-up of the amount so refunded between FY 2018-19 and FY 2019-20 as desired by the Hon'ble Commission is not available.

It is pertinent to mention that transmission charges are accounted on actual basis as and when received. The transmission charges in FY 2018-19 were accounted on the basis of the bills received during that year which has since been trued up, therefore, it is humbly submitted that the aforesaid refund of transmission charges does not affect the truing up of FY 2018-19.

Further, with respect to nature of POC Bills it is humbly submitted that the same has been described in detail in CERC's order no. L-1/44/2020-CERC dated 29.04.2011 in the matter of approval of Transmission Service Agreement, Revenue Sharing Agreement, Billing, Collection and Disbursement Procedure under Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses), Regulations, 2010 and CERC (Sharing of Inter State Transmission Charges and Losses) (Fifth Amendment) Regulations, 2017. The relevant extract of the order is enclosed as Annexure-5 (Soft copy in PDF).

Unquote

4.5.50 Thus, the amount of Rs. (6.91) Crore represents the balance amount with respect to credit for HVDC charges paid for Champa Kurukshetra Pole-1 Line, which was already accounted for on accrual basis in FY 2019-20 and being set-off against monthly transmission charges billed by PGCIL.

4.5.51 Further, the Petitioner has claimed Rs. 1.42 Crore towards PoC Charges for power purchased from M/s DIL for the settlement period from January 2020 to March 2020 having invoice No. NPCL/POC20-21/05. The Commission vide deficiency letter dated April 26,2022 sought justification for claiming the prior period expenses for FY 2019-20 in FY 2020-21 and submit an undertaking that the same has not been claimed in previous Tariff filings. In reply the Petitioner stated that the above-referred bill is in the nature of PoC Third Bill issued by PGCIL for transmission charges from time to time as per the methodology given in CERC's order no. L-1/44/2020-CERC dated April 29, 2011 in the matter of approval of Transmission Service Agreement, Revenue Sharing Agreement, Billing, Collection and Disbursement Procedure under Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses), Regulations, 2010 and CERC (Sharing of Inter State Transmission Charges and Losses) (Fifth Amendment) Regulations, 2017.

4.5.52 The Petitioner submitted that the amount of Rs. 1.42 Crore is not the prior period expenses as the same is billed by PGCIL during FY 2020-21 as per the above methodology of the Hon'ble CERC. Further, the Petitioner has confirmed that the same has not been claimed in previous Tariff filings.

4.5.53 Taking into consideration the above submission made by the Petitioner, the Inter-state & Intra state Transmission charges are considered as claimed by the Petitioner as the Transmission charges are approved as per actuals.

4.5.54 Further, considering the Intra-state transmission losses of UPPTCL (3.37%) as approved by the Commission while Truing-Up for FY 2020-21, the transmission losses has been accordingly recomputed, keeping the ex-bus MU and NPCL bus MU constant. The inter-state losses have been recomputed only for the purpose of representation and is not the actual loss.

4.5.55 Accordingly, the Long-Term power from DIL (including Transmission cost) for FY 2020-21 approved is as shown in the Table below:

TABLE 4-22-POWER PURCHASE FROM LONG TERM SOURCE (DIL) FOR FY 2020-21 AS APPROVED BY THE COMMISSION (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	1300.69	3.83%	3.37%	1208.69	233.16	283.16	516.32	73.17	24.86	98.03	614.35	5.08

Medium Term Power Purchase

4.5.56 The details of Medium-Term Power Purchase with Transmission cost as claimed by NPCL for FY 2020-21 is shown in the Table below:

TABLE 4-23: POWER PROCUREMENT FOR MEDIUM TERM FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER

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)
MTPPA-(APPCPL-Govt. of AP)	212.42	3.18%	3.56%	198.36	37.09	49.70	86.79	8.28	3.96	12.24	99.03	4.99
APPCPL-Govt. of Nagaland	102.23	2.75%	3.55%	95.85	18.31	23.44	41.76	3.62	1.94	5.56	47.31	4.93
PTC-SKS Power (Additional Claim)	-	-	-	-	-	-	-	1.38	-	1.38	1.38	-

4.5.57 The Commission observed that a provision of Rs. 35.00 lac for each source (MTPPA-(APPCPL-Govt. of AP & APPCPL-Govt. of Nagaland) has been shown in the power purchase summary. The Commission directed the Petitioner to submit the bill wise details matched with the bills and justification of making the provision of fixed charges along with its bills & payment vouchers. In reply, the Petitioner submitted the following: -

Quote

The Company vide its Petition no 1797 of 2021 has submitted details of power purchase cost for FY 2020-21 alongwith copies of the bills (Ref: Annexure 15 of the aforesaid petition) for the kind perusal of the Hon'ble commission. In the aforesaid details, the variation on account of various deduction/ additional charges/ provisions in accordance with the power purchase agreement has been included in the total cost of power procured.

With regard to the aforesaid query with respect to Medium term power, detail of aforesaid variation on account of various deductions/ additional charges/ provisions in accordance with the power purchase agreement duly reconciled with the details of power purchase cost already submitted vide Annexure 15 of the petition no. 1797 of 2021 is enclosed as Appendix-1 (Soft Copy) for the kind perusal of the Hon'ble Commission.

Further, with regard to the provision of Fixed Cost, the Company would like to draw the kind attention of the Hon'ble Commission towards the provisions of Article 11.4.2 of Power purchase agreement dated 23rd January, 2020 (duly approved by the Hon'ble Commission vide order dated 28.02.2020) which have been reproduced herein below:-

> *"11.4.2 The obligations of the Utility to pay Fixed Charges in any Accounting Year shall in no case exceed an amount equal to the Fixed Charge due and payable for and in respect of the Normative Availability of 85% (eighty five per cent) computed with reference to the Contracted Capacity (the "Capacity Charge"). Provided, however, that in the event of Despatch of the Power Station beyond such 85% (eighty five per cent), Incentive shall be payable in accordance with the provisions of Clause 11.6.1."*

Therefore, the Company in accordance with the provisions of the Article 11.4.2 of PPA dated 23rd January, 2020 has made requisite provision for fixed charges with respect to the normative availability @ 85% only while the actual availability of the plant i.e. APPCPL - Govt of Arunachal Pradesh and APPCPL-

Govt of Nagaland was 94% and 92% respectively. It is pertinent to mention that the statutory auditors have duly checked and verified the provision and found the same in accordance with the provisions of PPA. The Company has also deducted TDS on the aforesaid provision in compliance with the provisions of Income Tax Act 1961. It is requested to kindly consider the aforesaid provision while truing up ARR for FY 2020-21.

Unquote

4.5.58 The Commission observed that the Petitioner has also claimed incentive in the Medium Term Power Purchase sources viz., GoAP and GoN. The Commission vide deficiency letter dated April 26,2022 sought from the Petitioner details of relevant clause under which the same has been claimed along with detailed calculation. In reply, the Petitioner submitted that it has tied-up the following Medium Term Power through Competitive Bidding on DEEP Portal in accordance with the Guidelines of Central Government:

TABLE 4-24: DETAILS OF MTPPA AS SUBMITTED BY THE PETITIONER

Vendor	Source	Capacity	Duration	Period	Nature
APPCPL	DoP, GoAP	50 MW	RTC	Apr-Sep	Large Hydro
		25MW	4 Hrs.	Oct-Nov	
		25MW	2 Hrs.	Dec-Mar	
	DoP, GoN	25 MW	RTC	Apr-Sep	
		25MW	4 Hrs.	Oct-Nov	
		25MW	2 Hrs.	Dec-Mar	

4.5.59 The tariff discovered through bidding i.e., Rs. 5.46 per unit landed at NPCL Bus based on prevailing transmission charges and losses, was duly approved by the Commission vide Order dated February 28, 2020 along with respective medium-term power purchase agreements.

4.5.60 The clause 11.1 of aforesaid PPA of MT Power provides for payment of Incentives as reproduced below:

Quote

11.1 *Incentive and Damages*

11.1.1 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.

11.1.2 *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."*

Unquote

4.5.61 Accordingly, based on above-referred clause of MTPPA, the computation of incentive is as under:

TABLE 4-25: COMPUTATION OF INCENTIVE FOR MTPPA AS SUBMITTED BY THE PETITIONER

S. No.	Particulars	U.o.M.	Ref.	APPCPL (Source-GoAP)	APPCPL (Source-GoN)
1	Normative Availability	MUs	a	179.24	88.70
2		%	b	85%	85%
3	Actual Dispatch	MUs	c	198.36	95.89
4		%	d	94%	92%
5	Incentives units	MUs	e=c-a	19.12	7.18
6	Incentives Rate (i.e. 50% of approved FC)	Rs. /kWh	f	1.05	1.04
7	**Incentives Amount**	**Rs. Cr.**	**g=e*f/10**	**2.00**	**0.75**

4.5.62 The Commission in its Order dated February 28, 2020 in Petition No. 1552 of 2020 approved the power purchase from M/s APPCPL- Source: Department of Power, Govt. of Arunachal Pradesh and M/s APPCPL- Source: Department of Power, Govt. of Nagaland. Further, the Commission in the above said Order also adopted the tariff for procurement from the above approved source. The relevant extract of Order dated February 28, 2020 is reproduced below:

Quote

Source	**_**	**Department of Power, Govt. of Arunachal Pradesh**	**Department of Power, Govt. of Arunachal Pradesh**
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 Petitioner is disposed of in terms of above.

Unquote

4.5.63 Thus, the Commission vide its Order dated February 28, 2020 in Petition No. 1552 of 2020 adopted the tariff from M/s APPCPL- Source: Department of Power, Govt. of Arunachal Pradesh and M/s APPCPL- Source: Department of Power, Govt. of

Nagaland.

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 (Source- Department of Power, Govt. of Arunachal Pradesh and M/s APPCPL- Source: Department of Power, Govt. of Nagaland).

4.5.65 The Commission is of the view that any charges over and above the approved value at NPCL Periphery, as approved in the Order dated February 28, 2020 in the Petition No. 1552 of 2020, cannot be allowed to be passed on to the consumers.

4.5.66 Therefore, the Commission has considered lower of the two values i.e., claimed vs approved for each of the components of tariff for approval of procurement of power from Medium Term source. The medium-term power procurement for FY 2020-21 is approved as shown in the Table below:

TABLE 4-26: APPROVED PER UNIT COST FROM M/S APPCPL- SOURCE: DEPARTMENT OF POWER, GOVT. OF A.P. FOR FY 2020-21 (RS./KWH)

Particular	**Government of A.P. (Medium term)**		
	Approved in Order dated 28.02.2020	**Claimed**	**Approved**
MU at NPCL bus	-	198.36	198.36
Fixed Charges (Rs. Crore)	-	37.11	37.11
Fixed Charges (Rs./kWh)	2.09	1.87	1.87
Energy Charges (Rs. Crore)	-	40.58	40.58
Energy Charges (Rs./kWh)	2.09	2.05	2.05
Amount (Rs. Crore)	-	77.70	77.70
Amount (Rs./kWh)	4.18	3.92	3.92
Total Transmission (Rs. Crore)	-	12.24	12.24
Total Transmission (Rs./kWh)	1.00	0.62	0.62
Transmission Loss (Rs. Crore)	-	6.75	5.55
Transmission Loss (Rs./kWh)	0.28	0.34	0.28
Incentives (Rs. Crore)	-	2.00	0.00
Incentives (Rs./kWh)	0.00	0.10	0.00

Particular	**Government of A.P. (Medium term)**		
	Approved in Order dated 28.02.2020	**Claimed**	**Approved**
Provisions of Fixed Cost (Rs. Crore)	-	0.35	0.00
Provisions of Fixed Cost (Rs./kWh)	0.00	0.02	0.00
Total (Rs. Crore)	**-**	**99.03**	**95.49**
Per Unit Cost (Rs./kWh)	**5.46**	**4.99**	**4.81**

TABLE 4-27: APPROVED PER UNIT COST FROM M/S APPCPL- SOURCE: DEPARTMENT OF POWER, GOVT. OF NAGALAND FOR FY 2020-21 (RS./KWH)

Particular	**Government of Nagaland (Medium term)**		
	Approved in Order dated 28.02.2020	**Claimed**	**Approved**
MU at NPCL bus	-	95.89	95.89
Fixed Charges (Rs. Crore)	-	18.15	18.15
Fixed Charges (Rs./kWh)	2.09	1.89	1.89
Energy Charges (Rs. Crore)	-	19.57	19.57
Energy Charges (Rs./kWh)	2.09	2.04	2.04
Amount (Rs. Crore)	-	37.72	37.72
Amount (Rs./kWh)	4.17	3.93	3.93
Total Transmission (Rs. Crore)	-	5.56	5.56
Total Transmission (Rs./kWh)	0.99	0.58	0.58
Transmission Loss (Rs. Crore)	-	2.94	2.88
Transmission Loss (Rs./kWh)	0.30	0.31	0.30
Incentives (Rs. Crore)	-	0.75	0.00
Incentives (Rs./kWh)	0.00	0.08	0.00
Provisions of Fixed Cost (Rs. Crore)	-	0.35	0.00
Provisions of Fixed Cost (Rs./kWh)	0.00	0.04	0.00
Total (Rs. Crore)	**-**	**47.31**	**46.15**
Per Unit Cost	**5.46**	**4.93**	**4.81**

4.5.67 In regard to claim of Rs. 1.38 Crore towards PTC-SKS Power (Additional claim), the Commission is of the view that any charges over and above the all-inclusive rate of Rs. 4.25 per /kWh at NPCL Periphery, as approved in the Order dated July 31, 2018 in the Petition No. 1325 of 2018, cannot be allowed to be passed on to the consumers. Further, since the claim of the Petitioner with respect to Duty charges is still pending in CERC hence, the same is not being allowed in the True Up of FY 2020-21.

4.5.68 Thus, taking into consideration the above, the power procurement from Medium

Term Source approved by the Commission for FY 2020-21 is tabulated below: -

TABLE 4-28: APPROVED MEDIUM TERM PURCHASE BY THE COMMISSION FOR FY 2020-21 (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	212.42	3.36%	3.37%	198.36	37.11	46.14	83.25	12.24	95.49	4.81
APPCPL-Govt. of Nagaland	102.23	2.93%	3.37%	95.89	18.15	22.45	40.60	5.56	46.15	4.81

Power procurement from Renewable sources:

4.5.69 The Commission in its Tariff Order for FY 2020-21 dated December 04, 2020 approved the procurement of 357.46 MUs through Renewable Sources. The details of Renewable Power purchase in True-up of FY 2020-21 as submitted by the Petitioner is shown in the Table below: -

TABLE 4-29: POWER PROCUREMENT FOR RENEWABLE SOURCES FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER

Source	MU at NPCL bus	Total (in Rs. Cr)	Per Unit Cost
Solar Power (GNIDA)	1.19	0.82	6.92
Solar Power (APPCPL)	0.35	0.19	5.54
Solar Power (Exchange-RE)	12.46	4.97	3.99
Solar Power (Net Metering)	8.20	6.60	8.05
Wind Power (PTC)	27.70	10.48	3.78
Non-Solar (Exchange-RE)	6.70	3.39	5.06
Hydro Power (Kreate Energy)	66.92	31.82	4.76

4.5.70 The Commission observed that the Petitioner has claimed the average power purchase cost of Rs. 8.05/kWh for Solar Power (Net Metering) for FY 2020-21 whereas the same for FY 2019-20 was Rs. 7.57/kWh The Commission vide deficiency letter dated June 01, 2022 sought justification for increase in average power purchase cost for Solar Power (Net Metering) from FY 2019-20 to FY 2020-21. In reply to Commission’s query, the Petitioner submitted that it has granted several connections under the Net-Metering Regulations, 2015 and 2019. The Company receives energy from such net metering consumers and provide corresponding credit (in unit terms) in their monthly consumption bill, therefore, valuation of energy received from Net-metered consumers for consideration in

Power Purchase Cost are made on the basis of Average Billing Rate of the consumer's category to which the consumer belongs. The details of ABR of energy received from Net-Meter consumers for FY 2021-22 in accordance with above-referred methodology is also submitted before the Commission. The Petitioner further added that FY 2020-21 was severely impacted by COVID-19 pandemic which significantly impacted the demand of the consumers. Hence, the consumption of consumers was comparatively lower as compared to FY 2019-20 and consequent ABR for the year was higher. Also, due to lower demand / consumption, the injection to the NPCL's grid was also higher as compared to last year.

4.5.71 With regards to variation in rate from FY 2019-20 to FY 2020-21, the Petitioner submitted that the same is due to the change in ABR of such net-metering consumers. The Petitioner submitted that the ABR may vary from one year to another due to various uncontrollable parameters such as load factor of consumers, actual sales, rate slabs, fixed and variable charge mix etc. as compared to preceding period even when there is no change in tariff rates. Accordingly, the variance in cost of power from Net-Meter consumer in comparison to preceding year as mentioned by the Commission is only due to change actual consumption and consequent average billing rate as shown in table below:

TABLE 4-30: SUMMARY OF POWER PROCURED FROM NET METER CONSUMERS AS SUBMITTED BY THE PETITIONER

Category	**FY 2019-20**			**FY 2020-21**		
	MU	**Rs. Crore**	**Rs. / kWh**	**MU**	**Rs. Crore**	**Rs. / kWh**
HV-1	3.18	2.62	8.25	5.33	4.55	8.54
HV-2	2.20	1.49	6.77	2.08	1.49	7.18
LMV-1	0.27	0.15	5.83	0.42	0.25	5.99
LMV3	-	-	-	0.19	0.16	8.22
LMV-4	0.04	0.04	8.41	0.09	0.08	8.54
LMV-6	0.05	0.04	7.66	0.08	0.06	8.15
Total	**5.74**	**4.34**	**7.57**	**8.20**	**6.60**	**8.05**

4.5.72 The Commission vide its Order dated July 14, 2015 in Petition No. 1012 of 2015 approved Power Purchase Agreement (PPA) between NPCL and Greater Noida Industrial Development Authority (GNIDA) for purchase of 1 MW Solar power. Further, the Commission vide its Order dated January 01, 2018 in Petition No. 1228 of 2017 approved power purchase agreement between NPCL and PTC India u/s 63 read with Sec 86(1) (b) & (e) of the Electricity Act, 2003. Further, Solar Net metering energy and solar Power (Exchange) is deemed approved.

Source	Approved by the Commission (Y/N)	Link
Solar Power (GNIDA)	Yes	https://www.uperc.org/App_File/1012-2015NoidaPowerCompanyLtd-pdf715201533327PM.pdf
Solar Power (APPCPL)	No	(Discussed in para. 4.5.79)
Solar Power (Exchange)	No	Deemed approved
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
Hydro Power (Kreate Energy)	No	(Discussed in para. 4.5.94)

4.5.73 Thus, for the power procured from the approved/ Deemed approved source, the Commission has taken into account the actual quantum and rate while approving.

4.5.74 The Commission had approved the power procurement from Solar Power (GNIDA) at Rs. 7.06/kWh in its Order dated July 14, 2015 (Petition No. 1012 of 2015) against the Petitioner has claimed the rate as Rs. 6.92/kWh. Therefore, the Commission has considered the actual value as claimed by the Petitioner for truing up for FY 2020-21.

4.5.75 The Petitioner has claimed the power procurement from Wind Power (PTC) at Rs. 3.46/kWh at ex-bus against the approved value of Rs. 3.53/kWh in Order dated January 23, 2018 (Petition No. 1228 of 2017) and the same is approved by the Commission.

4.5.76 Further, in regard to power procured from the Solar power (Net Metering) the Commission observed that the per unit rate of Rs. 8.05/kWh 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

4.5.77 The Commission sought clarification from the Petitioner regarding the quantum of energy settled at the end of the FY 2020-21 as per the above Regulations. The Petitioner submitted that the following details:

Consumer Category	Units (KWh)	Sum of Energy Charges (Rs.)
HV-1	4,02,535	8,05,070
LMV-1M	66,046	1,32,091
LMV-4	10,763	21,527
LMV-6	29,227	58,454
Grand Total	**5,08,571**	**10,17,143**

4.5.78 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 the has been banked and considered as purchase by the Petitioner at Rs. 2/kWh as provided in the UPERC (Rooftop Solar PV Grid Interactive Systems Gross/Net Metering) Regulations, 2019.

4.5.79 The Commission observed that the Petitioner procured solar power from APPCPL which is not approved by the Commission however, the same is used to fulfil the

RPO obligation of the Petitioner. Therefore, the Commission has considered the same rate of solar power (Exchange-RE) for units procured from APPCPL as approved for the solar power purchased from Exchange-RE by the Petitioner.

4.5.80 Further, the Commission vide deficiency sought the details of RE power purchase from exchange as per time slot wise RTC (0-24hrs), Evening (17-23hrs), Day (10-17 hrs), Night (23-24, 00-06 hrs) and to populate the column with appropriate slot. In reply the Petitioner submitted the following:

Quote

The summary of Solar and Non-Solar power purchased during FY 2020-21 from power exchange in requisite format i.e. in time slots RTC (0-24 Hrs), Evening (17-23 Hrs), Day (10-17 Hrs), Night (23-24 & 00-06 Hrs) is provided in Table-2 and Table-3 here-in-below: -

Table-2: Summary of Solar Power Purchase from Exchange

Time Slot	***MUs (Ex-Bus NR)***	***Rs. / kWh***	***Rs. Cr.***
Night (23-24, 00-06 Hrs)	-	-	-
Morning (06-10 Hrs)	*1.78*	*3.46*	*0.62*
Day (10-17 Hrs)	*11.59*	*3.43*	*3.97*
Evening (17-23 Hrs)	-	-	-
Total (00-24 Hrs)	***13.37***	***3.43***	***4.59***

Table-3: Summary of Non- Solar Power Purchase from Exchange

Time Slot	***MUs (Ex-Bus NR)***	***Rs. / kWh***	***Rs. Cr.***
Night (23-24, 00-06 Hrs)	*4.40*	*4.41*	*1.94*
Morning (06-10 Hrs)	*0.11*	*4.45*	*0.05*
Day (10-17 Hrs)	*2.69*	*4.53*	*1.22*
Evening (17-23 Hrs)	-	-	-
Total (00-24 Hrs)	***7.19***	***4.46***	***3.20***

It is pertinent to mention that the above rates provided by the Company are weighted average rates while the rates published on the website of the exchange are simple average of rates, therefore, these rates are not comparable with the rates published on IEX website.

Unquote

4.5.81 The Commission observed that NPCL has claimed transmission charges for procurement of power from Solar Source. However, as the transmission charges are exempted for Solar energy, the Commission sought justification from NPCL for claiming the same. In reply NPCL submitted that the CTU/PGCIL has waived inter-state transmission charges & losses only in case of Solar and wind power procured on long-term basis. In this regard, Para 4 (i) of the Order dated 13.02.2018 of the Ministry of Power, GoI (later on 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

4.5.82 The Petitioner submitted that subsequent to above notification, Hon'ble CERC also 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

4.5.83 NPCL submitted that as per the above, the waiver for Inter-State Transmission charges was available only for Long-term power purchase arrangements from Solar and Wind Source and no waiver was available for such power procured through Short Term Open Access Sources.

4.5.84 Further, NPCL submitted that with regards to Intra-State transmission charges on the Solar and Wind power, the Commission vide Regulation 32 of UPERC's CRE Regulations, 2019 has provided only 50% exemption in the Intra-state transmission charges for purchase of Power from Solar sources and not from wind sources. The relevant extracts are reproduced here-in-below:

Quote

> ***32. Transmission Charges and Wheeling Charges:***
>
> *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 will be applicable as per technical feasibility and U.P. Electricity Regulatory Commission (UPERC) Regulations, as amended from time to time.*

Unquote

4.5.85 Apart from above, subsequent to implementation of new CERC (Sharing of Inter State Transmission Charges and Losses), Regulation, 2020 with effect from November 01, 2020, the Inter-State transmission charges for Short Term Open Access for Distribution Licensee having LTA/MTA, were made applicable only on the quantum over and above the existing LTA/MTA if any.

4.5.86 NPCL submitted that based on above Regulations, the Company has incurred Inter-State and Intra-State transmission charges as applicable for RE Power Purchased during FY 2020-21 as summarised in Table below: -

Source of Power	Arrangement	Inter-state Trans. Charges (Rs. Cr.)	Intra-State Trans. Charges (Rs. Cr.)	Applicability of Transmission Charges
--Solar Power :-				
GNIDA	Long-Term	-	-	No transmission charges applicable as Plant situated in Greater Noida
APPCPL	Long-Term	-	-	No transmission charges applicable as Plant situated in Greater Noida
Net Metering	Long-Term	-	-	No transmission charges applicable as Plant situated in Greater Noida
Power Exchange	Short-Term	0.07	0.31	Being Short-term arrangement full Inter-State Transmission Charges levied for power procured till Oct-20 alongwith Intra-State Transmission charges without any waiver.
Non-Solar Power :-				
PTC (Wind)	Long-Term	-	0.55	Being Long-term Non-Solar source, only Intra-state Transmission charges levied without any waiver.
Exchange	Short-Term	-	0.18	Being Short-term arrangement wherein power is drawn after Oct-20, no Inter-State Transmission Charges levied under new CERC (Sharing of Transmission Charges and Losses) Regulation, 2020, while Intra-State Transmission charges levied without any waiver.
Kreate Energy (Hydro Power with HPO)	Short-Term	3.43	1.44	Being Short-term arrangement wherein power procured before Oct'20, full Inter-State Transmission Charges and Intra-State Transmission charges levied without any waiver.
Total		**3.51**	**2.49**	

4.5.87 In regard to transmission charge, the Petitioner submitted that being Short-term arrangement full Inter-State Transmission Charges levied for power procured till Oct-20 along with Intra-State Transmission charges without any waiver shall be levied.

4.5.88 The Commission observed that the claim of Rs. 0.07 Crore of inter-state transmission charge is for the month Oct'20. Thus, the Commission approves the Inter-State transmission charge of Rs. 0.07 Crore as inter-state transmission charge.

4.5.89 From the submission made above by the Petitioner, it may be inferred that the intra-state transmission charges are also not levied after Oct'20. However, neither the same is clear from the claim and bill wise summary that the claim made is for the month of Oct'20 or for the complete FY 2020-21. The Commission is of the view that the Petitioner has not provided the proper justification towards the intra-state transmission charge of Rs. 0.31 Crore. Thus, the Commission does not allow the same for FY 2020-21.

4.5.90 Further, it has also been observed that in the solar power procured from exchange-RE, the Petitioner has 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 power through Solar Power (Exchange-RE).

4.5.91 The Petitioner has also purchase Non-Solar power from Exchange-RE. Further, the Petitioner has also claimed APPCPL's Trading Margin @ Rs. 0.03/kWh and GST @ 18% thereon in this power. Therefore, taking into consideration the above, the Commission is disallowing the trading margin of APPCPL including GST on purchase of power through Non-Solar Power (Exchange-RE).

4.5.92 For intra-state transmission charge on non-solar (Exchange-RE), since the same is not waived, the Commission has allowed the intra-state transmission charge on actuals.

4.5.93 The Commission sought the time slot wise details of power procured from Kreate Energy (Hydro) viz., RTC (0-24hrs), Evening (17-23hrs), Day (10-17hrs), Night (23-24 & 00-06hrs), Morning (06-10hrs). In reply NPCL submitted that the Company has procured Hydro Power from May-Sep'20 during 08:00 hrs to 19:00 hrs (Day Power) through M/s Kreate Energy by participating in the Tender published by the Power Department, Govt. of Sikkim. The above power was procured to meet the Company's HPO / Non-Solar RPO. Accordingly, the Petitioner has procured 70.97 MU for Rs. 26.95 Crore @ Rs. 3.80 per unit at NR-Periphery.

4.5.94 With regards to hydro power procurement from Kreate Energy, the Commission is of the view that the Petitioner must have taken prior approval. Hence, the Commission deems it fit not to approve the tariff of Rs. 3.80/kWh for the power purchase from Kreate Energy. The Commission has considered the tariff of non-solar power of Rs. 3.68/kWh as discovered in G-TAM for the month of Sep'20. The power was purchased from May 01, 2020 to Sep 30, 2020. However, the Commission has considered the G-TAM rate for Sep'20 as the G-TAM came into existence in Sep'20.

4.5.95 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. Accordingly, the power purchase approved from renewable sources is as under:

Table 4-31: Approved Power Purchase of Renewables for FY 2020-21

Particulars	**True Up Petition for FY 2020-21**			**Approved for True Up for FY 2020-21**		
	Energy (MU) at NPCL Periphery	**Per Unit cost (Rs. /kWh)**	**Power Purchase Cost (Including Trans. Charges) (Rs. Crore)**	**Energy (MU) at NPCL Periphery**	**Per Unit cost (Rs./kWh)**	**Power Purchase Cost (Including Trans. Charges) (Rs. Crore)**
Solar Power (GNIDA)	1.19	6.92	0.82	1.19	6.92	0.82
Solar Power (APPCPL)	0.35	5.54	0.19	0.35	3.42	0.12
Solar Power (Exchange-RE)	12.46	3.99	4.97	12.46	3.72	4.64
Solar Power (Net Metering)	8.20	8.05	6.60	0.51	2.00	0.10
Wind Power (PTC)	27.70	3.78	10.48	27.70	3.78	10.48
Non-Solar (Exchange-RE)	6.70	5.06	3.39	6.70	5.02	3.37
Hydro Power (Kreate Energy)	66.92	4.76	31.82	66.92	4.63	30.96
Power Procurement from Renewable source	**123.51**	**4.72**	**58.28**	**115.83**	**4.36**	**50.49**

TABLE 4-32: APPROVED RENEWABLE POWER PURCHASE BY THE COMMISSION FOR FY 2020-21 (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)	1.19	0.00%	0.00%	1.19	0.00	0.82	0.82	0.00	0.82	6.92
Solar Power (APPCPL)	0.35	0.00%	0.00%	0.35	0.00	0.12	0.12	0.00	0.12	3.42
Solar Power (Exchange-RE)	13.37	3.57%	3.37%	12.46	0.00	4.57	4.57	0.07	4.64	3.72
Solar Power (Net Metering)	0.51	0.00%	0.00%	0.51	0.00	0.10	0.10	0.00	0.10	2.00
Wind Power (PTC)	28.71	0.15%	3.37%	27.70	0.00	9.93	9.93	0.55	10.48	3.78
Non-Solar (Exchange-RE)	7.19	3.53%	3.37%	6.70	0.00	3.195	3.20	0.17	3.37	5.02
Hydro Power (Kreate Energy)	70.97	2.41%	3.37%	66.92	0.00	26.09	26.09	4.87	30.96	4.63

4.5.96 The Commission in its UPERC (Promotion of Green Energy through Renewable Purchase Obligation) (First Amendment) Regulations, 2019 provided the RPO to be met by the Licensee 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
2020-21	6.00	2.00	3.00	11.00

4.5.97 The compliance status of RPO submitted by the Petitioner for FY 2020-21 is as shown in the Table below:

TABLE 4-33: RPO DETAILS AS SUBMITTED BY NPCL FOR FY 2020-21 (MU'S)

RE Power	Opening Unfulfilled Obligation	Obligation for the year	Obligation met during the year*	Closing Unfulfilled Obligation
Solar	44.29	51.53	51.21	44.62
Non-Solar	71.85	103.07	34.40	140.52
Hydro Power	19.85	34.36	66.92	(12.71)
Total	**135.99**	**188.96**	**152.52**	**172.42**

** including gross generation under net-metering arrangements*

4.5.98 Before discussion on the RPO compliance status for FY 2020-21, the Commission finds it necessary to discuss on the cumulative RPO compliance status upto FY 2019-20. The Commission in its Tariff Order dated December 04, 2020, while carrying out the true-up for FY 2018-19 had determined the RPO compliance status upto FY 2018-19. Further, the Commission in its Tariff Order dated August 26, 2021, while carrying out the true-up for FY 2019-20 had determined the RPO compliance status upto FY 2019-20. It has come to the notice of the Commission that in the

Tariff Order dated December 04, 2020, while carrying out the true-up for FY 2018-19, an inadvertent error had crept in wherein the solar and non-solar RPO for FY 2010-11 and FY 2011-12 had been considered as 1% and 5% respectively, whereas the solar and non-solar RPO as per RPO Regulations is 0.25% and 3.75% respectively for FY 2010-11 and 0.5% and 4.5% respectively for FY 2011-12. The Commission, in this Order has re-determined the RPO status for FY 2010-11 and FY 2011-12 and consequently for the following years upto FY 2019-20 considering the targets for the respective years as per the Regulations.

4.5.99 Accordingly, the revised RPO compliance status computed for the period from FY 2010-11 to FY 2019-20 is as shown in the Tables below:

TABLE 4-34: RPO COMPUTED FOR FY 2010-11 TO FY 2017-18

Sl. No.	Description	Reference	MU
1	**Total sales from FY 2010-11**	**i**	**786.53**
2	Solar RPO target	**ii**	0.25%
3	Non-Solar RPO target	**iii**	3.75%
4	Solar Obligation	**iv**	1.97
5	Non-Solar Obligation	**v**	29.49
6	**Total sales from FY 2011-12**	**vi**	**876.36**
7	Solar RPO target	**vii**	0.50%
8	Non-Solar RPO target	**viii**	4.50%
9	Solar Obligation	**ix**	4.38
10	Non-Solar Obligation	**x**	39.44
11	**Total Solar Obligation**	**xi=(iv+ix)**	**6.35**
12	**Total Non-Solar Obligation**	**xii=(v+x)**	**68.93**
13	Total sales from FY 12-13 till FY 17-18	A	7,964.41
14	Hydro Purchase of FY 2016-17 and FY 2017-18	B	338.08
15	**Net Power Sale for RPO computation**	**C=A-B**	**7,626.33**
16	**Total Obligation for the year (%)**		
17	Solar (%)	D	1.00%
18	Non Solar (%)	E	5.00%
19	**Total Obligation for year FY 2010-11 till FY 17-18**		
20	Solar (MU)	F=(D*C)+xi	82.61
21	Non Solar (MU)	G=(E*C)+xii	450.25
22	**Total Obligation from FY 2010-11 till FY 2017-18 (MU)**	**H=F+G**	**532.86**
23	**Total RPO Fulfilled till FY 2017-18**		
24	Solar (including net metering)	I	37.24
25	Non Solar	J	165.41
26	**Total RPO Fulfilled till FY 2017-18**	**K=I+J**	**202.65**
27	**Balance Obligation to be fulfilled in FY 18-19**	**L=M+N**	**330.21**
28	Solar	M=F-I	45.37
29	Non Solar	N=G-J	284.84

TABLE 4-35: RPO COMPUTED FOR FY 2018-19

Sl. No.	Particulars	Reference	Quantum (MU)
1	Total Sales for FY 2018-19	**A**	**1850.07**
2	Hydro Purchase during the year (AD Hydro)	B	132.77
	Net Power Sale for RPO computation	C=A-B	1717.30
3	**Total Obligation for the year (%)**		
4	Solar (%)	D	1%
5	Non Solar (%)	E	5%
6	**Total Obligation for year**		
7	Solar (MU)	F=D*C	17.17
8	Non Solar (MU)	G=E*C	85.86
9	**Total Obligation for the year(MU)**	**H=F+G**	**103.04**
10	**Total RPO Fulfilled during the year**		
11	Solar	I	5.72
12	Non Solar	J	310.37
13	**Total RPO Fulfilled**	K=I+J	**316.08**

TABLE 4-36: REVISED RPO STATUS COMPUTED BY THE COMMISSION TILL FY 2018-19 (MU)

RE Power	Opening Unfulfilled Obligation	Obligation for the year	Obligation met during the year	Closing Unfulfilled Obligation (for FY 2018-19)
Solar	45.37	17.17	5.72	56.83
Non-Solar	284.84	85.86	310.37	60.34
Total	**330.21**	**103.04**	**316.08**	**117.16**

TABLE 4-37: RPO COMPUTED FOR FY 2019-20

Sl. No.	Particulars	Reference	Quantum (MU)
1	Total Sales for FY 2019-20	**A**	**2080.65**
2	Hydro Purchase during the year	B	0.00
	Net Power Sale for RPO computation	C=A-B	2080.65
3	**Total Obligation for the year (%)**		
4	Solar (%)	D	2%
5	Non Solar (%)	E	5%
6	Hydro (%)	F	1%
7	**Total Obligation for year (MU)**		
8	Solar (MU)	G=D*C	41.61
9	Non Solar (MU)	H=E*C	104.03
10	Hydro (MU)	I=F*C	20.81
11	**Total Obligation for the year (MU)**	**J=H+G+I**	**166.45**
12	Solar	K	7.27

Sl. No.	Particulars	Reference	Quantum (MU)
13	Non Solar	L	87.75
14	Hydro	M	-
15	**Total RPO Fulfilled during the year (MU)**	**N=L+M+N**	**95.02**

TABLE 4-38: REVISED RPO STATUS COMPUTED BY COMMISSION TILL FY 2019-20 (MU)

RE Power	Opening Unfulfilled Obligation	Obligation for the year	Obligation met during the year	Closing Unfulfilled Obligation (for FY 2019-20)
Solar	56.83	41.61	7.27	91.17
Non-Solar	60.34	104.03	87.75	76.62
Hydro	0	20.81	-	20.81
Total	**117.16**	**166.45**	**95.02**	**188.59**

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.

4.5.101 In the true-up of FY 2020-21, the Petitioner has claimed the RPO at sales/ NPCL Periphery, whereas as per new methodology all the RPO calculation will be carried out at Generation Ex-Bus. Therefore, the Petitioner claim in light of this will be increase the obligation for the year and obligation met during the year.

4.5.102 Further, the Commission sought gross generation from Rooftop solar for the FY 2020-21. The Petitioner in its reply submitted that the following:

Quote

Name of Rooftop Solar	Obligated Entity	Capacity	Gross Generation Calculated	Gross Generation as per Meter	Energy Settled at the end of Year
HV-1	Please refer Note-1 below.	10.22	16.41	Please refer Note-2 below.	0.40

Name of Rooftop Solar	Obligated Entity	Capacity	Gross Generation Calculated	Gross Generation as per Meter	Energy Settled at the end of Year
HV-2		11.46	18.10		-
LMV-1M		1.23	1.93		0.07
LMV-3		-	-		-
LMV-3M		-	-		-
LMV-4		0.30	0.46		0.01
LMV-6		0.19	0.31		0.03
Total		**23.40**	**37.21**	**-**	**0.51**

Note-1: The Company has not received any information from Net-metering consumers regarding their status of "Obligated Entity"

Note-2: All the Consumers having roof-top solar PV plant have applied for and connected under Net-metering arrangement, hence metering data at generation point is not available.

Unquote

4.5.103 Based on the information submitted by the Petitioner, the Commission has considered the gross generation of 37.21 MUs from Rooftop solar in addition to other solar purchase for FY 2020-21 to meet the Solar RPO.

4.5.104 Accordingly, the RPO compliance computed by the Commission for FY 2020-21 is as shown in the Table below:

TABLE 4-39: RPO COMPUTED FOR FY 2020-21

S. No	Particular	Reference	Quantum (MU)
1	Total Ex-Bus Energy	**A**	**2344.24**
2	Hydro Purchase during the year	B	314.65
3	**Net Power Sale for RPO computation**	C=A-B	2029.59
4	**Total Obligation for the year (%)**		
5	Solar (%)	D	3%

S. No	Particular	Reference	Quantum (MU)
6	Non Solar (%)	E	6%
7	HPO Obligation for the year (%)	F	2%
8	**Total Obligation for year**		
9	Solar (MU)	G=D*C	60.89
10	Non Solar (MU)	H=E*C	121.78
11	HPO Obligation for the year (MU)	I=F*C	40.59
12	**Total Obligation for the year(MU)**	**J=G+H+I**	**223.25**
13	**Total RPO Fulfilled during the year**		
14	Solar	k	52.63
15	Non Solar	L	35.90
16	Hydro	M	70.97
17	**Total RPO to be fulfilled**	N=K+L+M	**158.99**
18	Balance Obligation to be fulfilled in FY 20-21	**O=P+Q+R**	**64.27**
19	Solar	P	8.76
20	Non Solar	Q	85.88
21	Hydro	R	(30.37)

TABLE 4-40: RPO STATUS COMPUTED BY COMMISSION TILL FY 2020-21

RE Power	Opening Unfulfilled Obligation (FY 2020-21)	Obligation for the year	Obligation met during the year	Closing Unfulfilled Obligation (for FY 2020-21)
Solar	91.17	60.89	52.12	99.93
Non-Solar	76.62	121.78	35.90	162.50
HPO	20.81	40.59	70.97	(9.57)
Total	**188.59**	**223.25**	**158.99**	**252.86**

Power Procurement from Short Term Sources:

4.5.105 The table below provide the detail of power procurement from short term sources as follows: -

TABLE 4-41: POWER PROCUREMENT FOR SHORT TERM FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER

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-DB Power)	88.97	1.99%	3.56%	84.09	0.00	40.30	40.30	0.29	0.10	0.39	40.69	4.84
Adani Enterprise	15.77	1.98%	3.56%	14.91	0.00	6.57	6.57	0.08	0.04	0.12	6.69	4.49
Power Purchase from Exchange	492.38	2.97%	3.47%	461.16	0.00	157.98	157.98	5.81	10.56	16.37	174.35	3.78
Withdrawal from Power Banked in FY 20	1.22	1.96%	3.56%	1.16	0.00	0.00	0.00	0.03	0.02	0.06	0.06	0.54

4.5.106 The Commission vide its order dated March 05, 2020 in Petition No. 1546 of 2020 approved power procurement from short term sources i.e., M/s Adani Enterprises Ltd. And M/s Arunachal Pradesh Power Corporation (P) Limited. The tariff approved by the Commission for the approved sources are as follows:

TABLE 4-42: SHORT TERM SOURCES APPROVED FOR FY 2020-21

Sl. No.	Bidder	Period	Duration (hrs)	Quantum (MW)	Rate at NPCL Bus (Rs./kWh)	PPA dated
1	M/s Adani Enterprises Ltd.	April 01, 2020 to September 30, 2020 (except Sundays)	00:00 to 02:00	50 MW	4.50	December 12, 2019
2	M/s Arunachal Pradesh Power Corporation (P) Limited	April 01, 2020 to October 31, 2020 (except Sundays)	19:00 to 24:00	100	4.89	December 26, 2019

4.5.107 Thus, the Commission vide its Order dated March 05, 2020 in Petition No. 1546 of 2020 approved short term procurement from M/s Adani Enterprises Ltd. And M/s Arunachal Pradesh Power Corporation (P) Limited considered all the facts/ data presented before the Commission and after prudence check approved the tariff of approved sources as Rs. 4.50/kWh and Rs. 4.89/kWh respectively at NPCL bus.

4.5.108 The Commission observed that the Petitioner has claimed energy charge for APPCPL (Source-DB Power) @ Rs. 4.89/kWh and after taking into account the rebate the rate comes out to be Rs. 4.79/kWh. In addition to above, the Petitioner has also claimed the Inter-State and Intra-State transmission charge. Similarly, for power purchased from Adani Enterprise, the Petitioner has claimed energy charge @ Rs. 4.50/kWh and after taking into account the rebate the rate comes out to be Rs. 4.41/kWh. In addition to above, the Petitioner has also claimed the Inter-State and Intra-State transmission charge for short term power procured from Adani Enterprise.

4.5.109 Therefore, the Commission allows Rs. 4.79/kWh at NPCL periphery for APPCPL (Source-DB Power) and Rs. 4.41/kWh at NPCL periphery for Adani Enterprise and disallows the inter and intra transmission charges claimed by the Petitioner in both the above sources.

TABLE 4-43: APPROVED SHORT TERM PURCHASE FROM M/S ARUNACHAL PRADESH POWER CORPORATION (P) LIMITED & M/S ADANI ENTERPRISES LTD. FOR FY 2020-21

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)	Total (in Rs. Cr)	Per Unit Cost
APPCPL (Source-DB Power)	88.97	2.18%	3.37%	84.09	-	40.30	40.30	4.79
Adani Enterprise	15.77	2.17%	3.37%	14.91	-	6.57	6.57	4.41

4.5.110 With regard to power purchase from exchange, the Commission observed that the NPCL has claimed the average power purchase cost of Rs. 3.21/kWh for power purchase from exchange for the period from April-2020 to March-2021. The Commission sought power purchase price time slot wise i.e., RTC (0-24hrs), Evening (17-23hrs), Day (10-17hrs), Night (23-24 & 00-06hrs), Morning (06-10hrs). In reply to the Commission's query NPCL submitted as under:

Time Slot	MU (Ex-Bus NR)	Rs./kWh	Rs. Crore
Night (23-24, 00-06 Hrs)	124.98	2.58	32.23
Morning (06-10 Hrs)	65.20	3.67	23.93
Day (10-17 Hrs)	184.42	3.12	57.49
Evening (17-23 Hrs)	117.78	3.76	44.34
Total (00-24 Hrs)	**492.38**	**3.21**	**157.98**

4.5.111 The Petitioner further submitted that the above rates are weighted average rates while the rates published on the website of the exchange are simple averages, therefore, these rates are not comparable with the rates published on IEX website.

4.5.112 The Petitioner submitted the power purchase cost from exchange as Rs. 3.78/kWh includes trading margin of Rs. 0.02/kWh to IEX and an additional margin of Rs. 0.03/kWh to APPCPL.

4.5.113 Therefore, the Commission considered the actual power purchase from exchange as claimed by the Petitioner. Further, 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's Trading Margin @ Rs. 0.03/kWh and GST @ 18% thereon.

4.5.114 The Commission observed that the Petitioner has claimed Rs 0.06 Crore under banking, while Note 17 of the Audited Accounts mentions the Power Banking Cost as Rs. 0.00 Crore. The Commission vide deficiency letter dated December 31, 2021 sought reconciliation of the same as per the Audited Accounts for FY 2020-21. In reply to the Commission query, the Petitioner stated that power banking is a cashless transaction (since settled in unit terms and not in amount) which doesn't carry any rate/ amount. It is for this reason the banking transactions have been specifically kept beyond the purview of DEEP Portal of Ministry of Power, GoI for procurement of power. Banking of power is only a barter system where power is traded against the power and does not have any financial impact. Accordingly, while submitting the power purchase cost for FY 2020-21, the Company has not considered the notional value of 1.16 MU withdrawn during FY 2020-21 from Power Banked during FY 2019-20. This treatment is in line with the similar practice followed in the True-up for FY 2019-20. Apart from above, Rs. 0.06 Crore is the inter-state/intra-state transmission charges for the power received in FY 2020-21 against the Power Banked in FY 2019-20. Further, as the Company has not banked any surplus power during FY 2020-21 for withdrawal during FY 2021-22, no current assets arises and hence under Notes 17 of Audited Accounts there is Nil value w.r.t. Power Banking.

4.5.115 Further on prudence check, the Commission found that neither the Petitioner took any prior approval of the Commission for Banking of Power, nor informed the Commission about it. The Commission also approved from the submission of the Petitioner that 1.16 MUs power has been received in the FY 2020-21 which was banked during the FY 2019-20. However, while truing up of FY 2019-20, the Commission had disallowed the banking of power. The relevant portion of the Tariff Order of FY 2021-22 dated August 26, 2021 is as under:

Quote

> *4.6.98 Further, in while Truing up of FY 2018-19, the Commission observed as under:*
>
> *"3.6.70 As regards banking of power, the Commission is of the view that only the banking of power purchase approved in FY 2017-18, is allowed without*

transmission charges. All other excess and unapproved short-term power purchased and banked in FY 2018-19 are disallowed and the Petitioner is directed to take prior approval of Commission for short term procurement (other than from exchanges) and for banking of power in future"

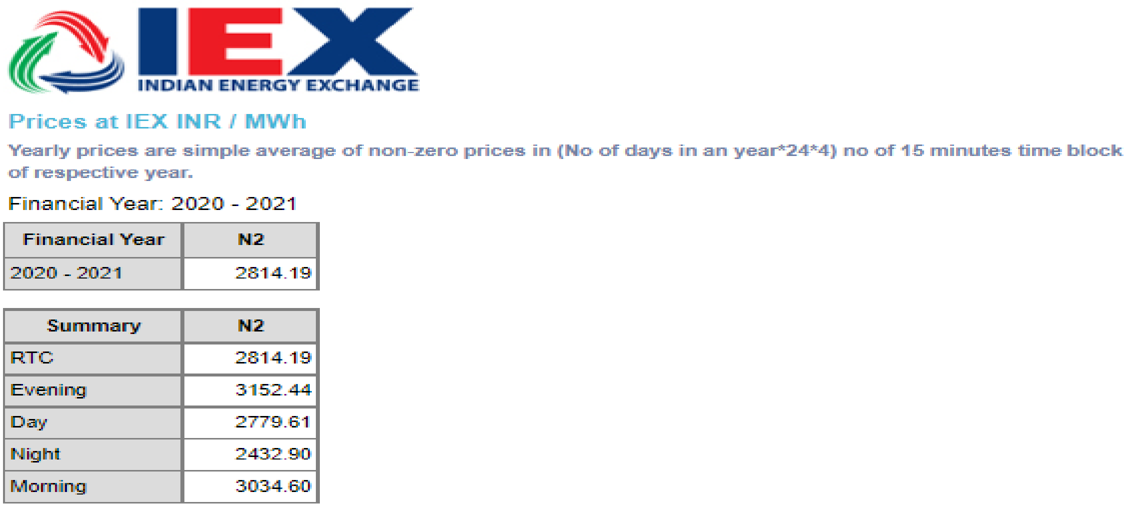
Accordingly, since the Petitioner has not taken any prior approval of the Commission the Commission disallows all the transaction(s) related to banking of power done in FY 2019-20.

Unquote

4.5.116 Therefore, in line with the views taken in the true up of FY 2019-20, the Commission disallows the power banking transaction done by the Petitioner in FY 2020-21.

4.5.117 After approving the above source, the remaining energy requirement of 8.90 MUs at NPCL Periphery is assumed to be procured from power exchange.

4.5.118 The Commission has considered the RTC rate of FY 2020-21 as available in the website of IEX as tabulated below:


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: 2020 - 2021

Financial Year	N2
2020 - 2021	2814.19

Summary	N2
RTC	2814.19
Evening	3152.44
Day	2779.61
Night	2432.90
Morning	3034.60

4.5.119 The Inter-State and Intra-State transmission charge is approved in proportion to the actual value of power procured through power exchange.

4.5.120 Based on the above, the power procurement from short-term sources approved for FY 2020-21 is as shown in the Table below:

TABLE 4-44: POWER PROCUREMENT FOR SHORT TERM FOR FY 2020-21 AS APPROVED BY THE COMMISSION

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-DB Power)	88.97	2.18%	3.37%	84.09	0.00	40.30	40.30	_	_	0.00	40.30	4.79
Adani Enterprise	15.77	2.17%	3.37%	14.91	0.00	6.57	6.57	_	_	0.00	6.57	4.41
Power Purchase from Exchange	492.38	3.07%	3.37%	461.16	0.00	156.29	156.29	5.80	10.51	16.31	172.60	3.74
Deemed Purchase from Exchange	9.50	3.07%	3.37%	8.90	0.00	2.67	2.67	0.11	0.20	0.31	2.99	3.36
Withdrawal from Power Banked in FY 20	–	–	–	–	–	–	–	–	–	–	–	–

Unscheduled Interchange:

4.5.121 It has been observed that NPCL has purchased 8.67 MU from DSM for FY 2020-21 in spite of the directions of the Commission given in previous Tariff Order to limit its UI and indulge in Real Time Markets. The Commission sought justification for the same. The Petitioner in its reply submitted that total drawl under DSM mechanism is 8.67 MU (Net) which is 0.39% of the total import for FY 2020-21. The Petitioner further submitted as under: -

Quote

a) Uncertain Demand: In our Petition no. 1797 of 2021, 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 60 MW power from Renewable Sources viz. 10 MW from Wind and 50 MW from Solar apart from almost 24 MW from Roof-top Solar connections. Also, the Company has already granted Open Access for 4.25 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. During the period i.e. Jun'2020 to Mar'2021, the Company has procured 23.43 MU 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

4.5.122 The Commission asked the Petitioner provide the data on actual energy input at T & D boundary of NPCL for FY 2020-21, duly certified by SLDC and also to provide the DSM account for FY 2020-21. The Commission observed that the License has 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.

4.5.123 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 Bus. The aforesaid Statement is duly verified by the Statutory Auditors of the Company.

4.5.124 Further, the Petitioner submitted that UPSLDC had 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.

4.5.125 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 2020-21. Due to non-compliance of the Commission’s directions, the Commission does not approve the claim of UI charges for FY 2020-21. Further, it is reiterated to limit its UI and indulge in real time market.

4.5.126 Further, with regard to the claim of Petitioner of Rs. 0.12 Crore for UPSLDC fees, the Commission vide deficiency letter dated December 31,2021 sought details of UPSLDC Application Fees for FY 2020-21 claimed by the Petitioner. In reply to Commission’s query, the Petitioner stated that the UPSLDC Application Fee for FY 2020-21 of Rs. 0.12 Crore represents the portion of Application Fees billed by

UPSLDC after deducting the amount allocated towards the application fees for scheduling Long-Term, Medium Term, Short Term and IEX Power. However, the Commission is of the view that such expenses shall form part of A&G expenses and not power purchase cost. Hence, the Commission does not approve the amount of Rs. 0.12 Crore claimed by the Petitioner towards UPSLDC Application Fee.

4.5.127 The Commission vide its Order dated November 10, 2020 in Petition Nos. 1515/2020 & 1571/2020 had carried out the true-up of FY 2017-18 and FY 2018-19 for UPPTCL. The Petitioner has claimed the arrears of Rs. 14.07 Crore towards the same. The Commission approves the amount of Rs. 14.07 Crore as claimed by the Petitioner.

4.5.128 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 2020-21 is shown in the Table below:

TABLE 4-45: POWER PURCHASE COST AND QUANTUM APPROVED BY THE COMMISSION FOR FY 2020-21 (RS. CRORE)

Particulars	True Up Petition			Approved for True Up FY 2020-21					
Sources of Power Purchase	Energy (MU) at NPCL bus	Avg. cost (Rs. /kWh)	Cost excluding Transmission (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 (from DIL)	**1208.69**	4.98	602.10	**1208.69**	4.27	**516.32**	73.17	24.86	**614.35**
Change in Law and Additional Coal Charges			8.93			**0.00**			
Medium Term Power	**294.25**	4.37	128.57	**294.25**	4.21	**123.85**	11.90	5.90	**141.64**
Additional claim Medium Term Power			1.38				0.00		
Short Term Power									
APPCPL (Source-DB Power)	84.09	4.79	40.30	84.09	4.79	40.30	-	-	40.30
Adani Enterprise	14.91	4.41	6.57	14.91	4.41	6.57	-	-	6.57
Power Purchase from Exchange	461.16	3.43	157.98	461.16	3.39	156.29	5.80	10.51	172.60
Deemed Power Purchase				8.90	3.00	2.67	0.11	0.20	2.99
Withdrawal from Power Banked in FY 20	1.16	0.04	0.00	-	-	-	-	-	-
Power Purchase from RE									
Solar Power (GNIDA)	1.19	6.92	0.82	1.19	6.92	0.82	0.00	0.00	0.82
Solar Power (APPCPL)	0.35	5.54	0.19	0.35	3.42	0.12	0.00	0.00	0.12
Solar Power (Exchange-RE)	12.46	3.68	4.59	12.46	3.67	4.57	0.07	0.00	4.64
Solar Power (Net Metering)	8.20	8.05	6.60	0.51	2.00	0.10	0.00	0.00	0.10
Wind Power (PTC)	27.70	3.59	9.93	27.70	3.59	9.93	0.00	0.55	10.48
Non-Solar (Exchange-RE)	6.70	4.78	3.20	6.70	4.77	3.20	0.00	0.17	3.37
Hydro Power (Kreate Energy)	66.92	4.03	26.95	66.92	3.90	26.09	3.43	1.44	30.96
UPPTCL True-up Arrear (FY 2017-18 & FY 2018-19) as per			14.07					14.07	14.07

Particulars	**True Up Petition**			**Approved for True Up FY 2020-21**					
Sources of Power Purchase	**Energy (MU) at NPCL bus**	**Avg. cost (Rs. /kWh)**	**Cost excluding Transmission (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)**
UPPTCL Tariff order dated 10.11.2020									
Other UPSLDC Application Fees			0.12					0.00	0.00
Unscheduled Interchange / DSM			6.08					0.00	0.00
Sub-total	**2196.36**	**4.57**	**1002.70**	**2187.78**	**4.07**	**890.83**	**94.48**	**57.72**	**1043.02**
Total Transmission Charges									
Transmission Charges of PGCIL			**96.22**			**94.48**			
Transmission Charges of UPPTCL			**58.20**			**57.72**			
Total Power Purchase Cost	**2196.36**	**5.27**	**1157.13**	**2187.78**	**4.77**	**1043.03**			

4.5.129 Further, as discussed in the sales section, the Petitioner have overbooked the sales of 11.41 (sales) MU under the unmetered categories 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 4-46: DISALLOWANCE IN PPC FOR FY 2020-21 (RS. CRORE)

S.NO.	**Particulars**	**Approved**
1	Excess Sales booked under unmetered categories (MU)	11.41
2	Distribution Loss (%)	7.92%
3	Excess energy at Discom periphery (MU)	12.39
5	Rate considered of short-Term power purchase at NPCL Bus (Rs/kWh)	3.74
6	**Disallowance in PPC due to excess sales booking in unmetered categories (Rs. Crore)**	**4.64**

4.5.130 The Commission had in the True-up of FY 2019-20 allowed the Petitioner the differential amount to True up amount payable by NPCL to UPPTCL. However, while Trueing up of FY 2020-21, the Commission came across two arrear bills raised by UPPTCL for the period FY 2017-18 & FY 2018-19. These arrears are being allowed as the same have been not dealt in the earlier True-ups. Taking into the consideration the same, in this True-up, the differential amount is not being allowed and the same will be treated in the appropriate true up based on the arrear bills raised by UPPTCL.

TABLE 4-47: NET POWER PURCHASE COST AS APPROVED BY THE COMMISSION FOR FY 2020-21

Particular	**Cost (Rs. Crore)**
Total Power Purchase Cost	1043.02
Less: Adjustment of Extra Sales	4.64
Net Power Purchase	**1038.39**

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 submitted that Regulation 45 of the MYT Regulations, 2019 deals with the O & M Expenses which is reproduced below: -

> ***"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.:

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"*

4.6.3 The Petitioner submitted that the towards the proviso as given above under A & G Expenses 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 even though these expenses are completely different and not comparable with the expenses which forms part of the A&G Expenses.

4.6.4 In this respect, the Petitioner submitted that the finance charges are being incurred on various facilities availed by the company with respect to Loans, both, Fund based and non-Fund based. The aforesaid facilities are linked with the volume of business viz. power purchase, debtors, capital expenditure, collection volumes in respect of digital transaction charges or CMS etc. and is nowhere dependent on inflation rates as has been proposed to be increased in the MYT Regulations 2019.

4.6.5 The Petitioner submitted that considering the above, the Commission has been approving such expenses as per audited annual accounts from time to time in its various tariff orders, recent being Tariff Order dated 3rd September, 2019. In-fact, as mentioned above, some of the charges like collection charges on digital modes of collection are being incurred in pursuance of the directions of the Commission e.g. no charges from consumers making payment through net-banking of an amount upto Rs. 4,000/-.

4.6.6 Thus, the above expenses are completely different and not comparable with the expenses which forms part of the A&G Expenses and hence Commission is requested to not to club with the finance charges with A&G Expenses and the allow the same on actuals as has been allowed hitherto.

4.6.7 The Petitioner submitted that similarly, the delayed payment surcharge accrues when a consumer defaults in payment of bills as per due date being generally 15 days from the date of billing which happens to be 2-7 days after the meter reading date which is generally taken after 30 /31 days interval. Hence, the total number of days after which the delayed payment surcharge accrues is almost 55 days which is more than the number of days for which a distribution licensee is compensated by interest on working capital as per MYT Regulations, 2019 i.e. 45 days. Hence, DPS belongs to the period beyond normative period and for 45 days for which interest on working capital is not provided in the Distribution Tariff Regulations. Thus, to appropriately compensate for the cost incurred for financing that deferred payment beyond the normative period, the Commission has been approving, in its various Tariff Orders issued from time to time since FY 2009-10 onwards, the cost of borrowing of such deferred receivables in the form of interest cost at relevant SBI-PLR. Consequently, it may be concluded that the financing cost of Delayed Payment Surcharge is nothing but interest on the money, equity or debt as the case may be arranged/provided by the Discom to fund delayed payment of electricity dues by the Consumers and has no similarity with nature of other A&G Expenses.

4.6.8 In view of the above, the Petitioner requested the Commission not to include the above finance charges and financing cost of DPS in determination of base year normative O&M Expenses and the same should be allowed separately. Accordingly, the Company has not included the above-mentioned Finance Charges and Financing Cost of DPS in the computation of Average A & G Expenses for 5 years and claimed it separately.

4.6.9 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. In this respect, it is submitted that the Commission had in addition to the normative O&M Expenses determined as Distribution Tariff Regulation, 2006 and MYT Regulation, 2014 has also allowed additional O&M expenses incurred by the Company which were 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.

4.6.10 The Petitioner submitted that since the Commission has approved the above-referred legitimate expenses incurred by the Company due to change in law / direction of the Commission after prudence check, 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 2020-21 vide it Tariff Order dated December 04, 2020 inadvertently not considered the above-mentioned additional O&M expenses being trued-up and approved in preceding years.

4.6.11 The Petitioner submitted that since, the above additional O&M expenses on Compliance of directives of the State Commission, Impact of Service Tax and Impact of GST need to be considered in determination of normative O&M Expenses for Base Year, therefore, the Company has included the same in the computation of Average O&M Expenses for Base Year.

4.6.12 The Petitioner submitted that the Commission vide its Tariff Orders dated December 04, 2020 and August 26, 2021 has not approved the Company’s claim for Impact of GST for FY 2018-19 and FY 2019-20 citing following grounds:-

a) The regulation does not provide for escalation of norms nor for adjustment of one-time expenses;

b) Since R & M Expenses are allowed as a percentage of GFA which includes GST, hence, the same may not be provided separately;

c) The Inflation indexes include the impact of GST.

4.6.13 The Petitioner submitted that as regards to this, the Company 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.*
>
> *………………….*
>
> *(g) The norms shall be determined at constant prices of base year and escalation on account of inflation shall be over and above the baseline."*

4.6.14 The Petitioner submitted that from the above, it can be seen that these provisions are general provisions and are applicable to entire O&M Expenses i.e., Employee Cost, Repair and Maintenance Expenses and Administration and General Expenses. In-fact, in compliance to the above regulations, the Commission has been so far approving the impact of GST in its earlier orders viz. Order dated 22.01.2019 and Order dated 03.09.2019.

4.6.15 The Petitioner submitted that, as regards the finding of the Commission that GFA already includes GST impact, the Company would like to mention here that R & M Expenses are allowed as a percentage of GFA and since, GST has come into effect only from 1.07.2017, thus, only additions post the aforesaid date can be said to include GST in the cost which is not even 10% of the whole GFA as at 31.03.2020 being considered for the purpose of computation of normative R & M expenses. Infact, in the subsequent years i.e., FY 2020-21 onwards, R & M Expenses are not computed based on GFA, hence, the aforesaid contention becomes all the more irrelevant.

4.6.16 The Petitioner submitted that, with regards to the assertion that the indexes include impact of the Taxes, in this regard, the Company would like to bring the kind attention of the Commission towards Press Release dated 12.05.2017 issued by Ministry of Commerce & Industry with respect to inflation indices of WPI (being used for the purpose of R&M Expenses and A&G Expenses) which clearly states that it does not include the impact of taxes.

4.6.17 Thus, the Petitioner requested the Commission to consider the claim of the Company by considering the provisions of the MYT Regulations 2019 which recognize Change in law/ Taxes & Duties as Uncontrollable Factor and its own

Orders dated 22.01.2019 & 03.09.2019 wherein it has approved the differential impact of GST @ 5.88% of the expenses.

4.6.18 The Petitioner submitted that in view of the above, it has included the Impact of GST for FY 2018-19 and FY 2019-20 in the computation of Average O&M Expenses for Base Year.

4.6.19 The Petitioner submitted that accordingly, 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, 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 Table herein below: -

TABLE 4-48: NORMATIVE O & M EXPENSES AS SUBMITTED BY THE PETITIONER (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	Employee Expenses	18.14	22.20	26.38	29.62	35.92	26.45
2	A&G Expenses	7.29	8.92	10.59	11.92	13.00	10.34
3	Regulatory Compliance	0.82	1.12	0.95	0.40	0.43	0.74
4	Additional expense due to change in S. Tax / GST on A&G Exp.	0.56	1.08	0.51	0.80	0.87	0.77
5	R & M Expenses	26.67	32.64	38.78	43.29	48.22	37.92
6	Additional expense due to change in S. Tax / GST on R & M Exp.	0.85	0.96	1.71	2.76	3.14	1.89
7	Gross O&M Expenses	54.33	66.93	78.91	88.79	101.59	78.11
8	Expenses Capitalised	(6.90)	(12.32)	(10.34)	(8.99)	(10.32)	(10.34)
9	Net O&M Expenses	47.43	54.61	68.57	79.80	91.27	67.77

4.6.20 The Petitioner submitted that 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 herein below: -

TABLE 4-49: ***COMPUTATION OF NORMATIVE O & M EXPENSES FOR BASE YEAR FY 2019-20 AS SUBMITTED BY THE PETITIONER (RS. CRORE)***

Sr. No	Particulars	Ref.	Emp. Exp.	A&G Exp.	R & M Exp.	O&M Exp.	Exp. Cap.	Net O&M
1	**Normative Expense (FY 17-18)**	**a**	**26.45**	**11.85**	**39.81**	**78.11**	**(10.34)**	**67.77**
2	Escalation Factor (FY 18-19)	b	5.20%	5.20%	5.20%			

Sr. No	Particulars	Ref.	Emp. Exp.	A&G Exp.	R & M Exp.	O&M Exp.	Exp. Cap.	Net O&M
3	**Normative Expense (FY 18-19)**	**c=a x (1 + b)**	**27.83**	**12.47**	**41.88**	**82.17**	**(8.99)**	**73.18**
4	Escalation Factor (FY 19-20)	D	6.30%	6.30%	6.30%			
5	**Normative Expense (FY 19-20)**	**e=c x (1 + d)**	**29.58**	**13.25**	**44.51**	**87.35**	**(10.32)**	**77.03**

4.6.21 The Petitioner submitted that accordingly, 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 2020-21 is provided herein below

Normative Employee Expenses

4.6.22 The Petitioner submitted that 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.:*
>
> *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"

4.6.23 The Petitioner submitted that accordingly, based on above Regulation, the normative employee expenses for FY 22020-21 works out as shown in following table:

TABLE 4-50: EMPLOYEE EXPENSES AS SUBMITTED BY THE PETITIONER (RS. CRORE.)

Particulars	Emp. Exp. for Base Year (FY 2019-20)	CPI Inflation	Emp. Exp. For FY 2020-21
	a	B	c=a x (1+b)
Normative Employee Expenses	29.58	5.35%	31.16

Administrative & General Expenses: -

4.6.24 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 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…."*

4.6.25 Accordingly, considering the norms as mentioned above, the normative A&G expenses for FY 2020-21 works out as shown in following Table: -

TABLE 4-51*: A&G EXPENSES AS SUBMITTED BY THE PETITIONER (RS. CRORE.)*

Particulars	A&G Exp. for Base Year (FY 2019-20)	WPI Inflation	A&G Exp. For FY 2020-21
	a	B	c=a x (1+b)
Normative A&G Expenses	13.25	2.96%	13.65

4.6.26 The Petitioner submitted that 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&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."*

4.6.27 The Petitioner submitted that accordingly, considering the norms as mentioned above, the normative R&M expenses for FY 2020-21 works out as shown in following Table:

TABLE 4-52: ***R&M EXPENSES AS SUBMITTED BY THE PETITIONER (RS. CRORE)***

Particulars	R&M Exp. for Base Year (FY 2019-20)	WPI Inflation	R&M Exp. For FY 2020-21
	a	B	c=a x (1+b)
Normative R&M Expenses	44.51	2.96%	45.83

4.6.28 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 Table below: -

TABLE 4-53: ***SUMMARY OF O&M EXPENSES AS SUBMITTED BY THE PETITIONER (RS. CRORE)***

Sl. No.	Financial Year	Nature	Employee Expenses	A&G Expenses	Reg. Compliance	S.Tax / GST on A&G Exp.	R & M Exp.	S.Tax / GST on R&M Exp.	Gross O&M Expenses	Expenses Capitalised	Net O&M Expenses
1	FY 15-16	Trued-up	18.14	7.29	0.82	0.56	26.67	0.85	**54.33**	(6.90)	**47.43**
2	FY 16-17	Trued-up	22.20	8.92	1.12	1.08	32.64	0.96	**66.93**	(12.32)	**54.61**
3	FY 17-18	Trued-up	26.38	10.59	0.95	0.51	38.78	1.71	**78.91**	(10.34)	**68.57**
4	FY 18-19	Claimed Normative	29.62	11.92	0.40	0.80	43.29	2.76	**88.79**	(8.99)	**79.80**
5	FY 19-20	Claimed Normative	35.92	13.00	0.43	0.87	48.22	3.14	**101.59**	(10.32)	**91.27**
6	FY 17-18	Normative	26.45	10.34	0.74	0.77	37.92	1.89	**78.11**	(10.34)	**67.77**
7	FY 18-19	Normative	27.83	12.47			41.88		**82.17**	(8.99)	**73.18**
8	FY 19-20	Normative	29.58	13.25			44.51		**87.35**	(10.32)	**77.03**
9	FY 20-21	Normative	31.16	13.65			45.83		**90.64**	(9.82)	**80.82**

4.6.29 The Petitioner submitted that the Commission vide Tariff Order dated December 04, 2020 has approved the O & M expenses at Rs. 64.28 Crore (net of employee cost capitalised) for FY 2020-21.

4.6.30 The Petitioner submitted that as per audited accounts of the Company, the actual O&M Expenses for FY 2020-21 are at Rs. 104.96 Crore (net of employee cost capitalised). The actual O&M Expenses for FY 2020-21 is provided in Table below along-with amount provisionally approved by the Commission in tariff order dated December 04, 2020.

TABLE 4-54: ***O&M EXPENSES AS SUBMITTED BY THE PETITIONER FOR FY 2020-21 (RS. CRORE)***

Sl. No.	Particulars	Approved	Normative	Actual
1	Repair & Maintenance Expenses	34.97	45.83	45.43
2	Employees Expenses including retiral benefits	24.94	31.16	56.29
4	Administrative & General Expenses	13.37	13.65	13.06

Sl. No.	Particulars	Approved	Normative	Actual
5	**Total O&M Expenses**	**73.28**	**90.64**	**114.78**
6	Employee Cost Capitalised	(9.00)	(9.82)	(9.82)
7	**Net O&M Expenses**	**64.28**	**80.82**	**104.96**
Total may not tally due to rounding offs				

4.6.31 The Petitioner submitted that 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 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 Regulations 45 of MYT Regulations, 2019.

4.6.32 The petitioner has requested the Commission to consider O & M expenses for FY 2020-21 at actuals owing to following factors enlisted below, being beyond the control of the Company: -

Compliance of New/Amended Regulations and Directions:

4.6.33 The Petitioner submitted that the Commission has been pioneering 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:

i) **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.

ii) **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.

4.6.34 The Petitioner submitted that in order to comply with the above new / amended Regulations, the Company is 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.

4.6.35 The Petitioner submitted that the Commission vide its Tariff Order dated 29.07.2021 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 extract of relevant para of the Tariff Order dated 29.07.2021 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".*

4.6.36 In view of the aforesaid submission, the Petitioner requested the Commission to allow additional expenses for compliance of newly promulgated Regulations over and above the normative expenses as being allowed to UPPCL's Discoms also.

Increase in Minimum wages

4.6.37 The Petitioner submitted that 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 2020-21 were as provided in Table:

TABLE 4-55: MINIMUM WAGES IN STATE OF U.P. SUBMITTED BY THE PETITIONER

Class of labour	As on 1st Apr'18	w.e.f. 1st Apr'20	w.e.f. 1st Oct'20	% Increase in Cover A
	A	B	C	D
Skilled	9,381.00	10,627.50	11,206.04	19.45%
Semi-skilled	8,375.00	9,487.50	10,004.53	19.46%
Unskilled	7,613.00	8,625.00	9,094.85	19.46%

4.6.38 The Petitioner submitted that the wages applicable from April 01, 2020 was higher by 19-20% as compared to wages prevailing on April 2018 (i.e., mean financial year considered for determination of norms). Thus, the wages applicable for full FY 2020-21 has been significantly higher as compared to the norms.

4.6.39 The Petitioner submitted that the Company's 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-NCR. The following Table-20 shows that minimum wages prevailing during FY 2020-21 in NCT-Delhi were higher by 62%-63% as compared to State of UP: -

TABLE 4-56: COMPARATIVE OF MINIMUM WAGES IN STATE OF U.P AND NCT-DELHI (WAGES IN RUPEES)

Period	Particulars	Ref.	Skilled	Semi-skilled	Unskilled
Apr-20 to Sep-20	NCT-Delhi	a	17,991	16,341	14,842
	State of U.P.	b	10,628	9,488	8,625
	Variation	c=a-b	7,364	6,854	6,217
	Variation (%)	d=c/b	69%	72%	72%
Oct-20 to Mar-21	NCT-Delhi	e	17,991	16,341	14,842
	State of U.P.	f	11,206	10,005	9,095
	Variation	g=e-f	6,785	6,336	5,747
	Variation (%)	h=g/e	61%	63%	63%

4.6.40 The Petitioner submitted that the Commission may appreciate 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. As the Commission is aware that all enterprise, associations, partnership, body corporates, companies etc. are bound by the provisions of Minimum Wages Act 1948 and the Company has no option but to comply with the same. Therefore, impact of the changes in minimum wages is beyond the control of the Company and cannot be subsumed within normative employee cost.

4.6.41 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, the 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.

4.6.42 The Petitioner submitted that although the MYT Regulation, 2019 provides for escalation of normative Employee Cost on the basis of Consumer Price Index (i.e., CPI), however, the resultant escalation is quite insufficient and more important is that the increase in minimum wages is not covered in CPI. Hence, the impact of increase in minimum wages do not get compensated through incremental CPI.

4.6.43 The Petitioner submitted that the Commission may observe that the Regulation 46 of 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 Company has been able to contain the same to 1.01% during the FY 2020-21. 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 4-57: SAVING IN PROVISION FOR BAD DEBTS AS SUBMITTED BY THE PETITIONER FOR FY 2020-21 (RS. CRORE)

Sl. No.	Particulars	U.o.M.	Reference	Actual
1	Revenue billed for the year	Rs. Cr.	a	1761.06

Sl. No.	Particulars	U.o.M.	Reference	Actual
2	Actual Provision for Bad & Doubtful debts	Rs. Cr.	b	17.78
3	Provision as % of Revenue billed	%	c= b/a	1.01%
4	Normative Provision for Bad & Doubtful Debt @2%	Rs. Cr.	d=a x 2%	35.22
5	Saving in provision for Bad & Doubtful debts	Rs. Cr.	e=d-b	17.44

4.6.44 The Petitioner submitted that from the above Table, the Commission may appreciate that the Company is able to limit Bad & Doubtful Debts at 1.01% against 2% on account of the fact that the Company 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 Company opts to reduce its manpower to align actual employee cost with the normative employee cost as per MYT Regulations, 2014, 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.

Recommendation of Sixth/Seventh Pay Commission:

4.6.45 The Petitioner submitted that with implementation of 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.

4.6.46 The Petition submitted that 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: -

Quote

> *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.*
>
> *…….*

Unquote

4.6.47 The Petitioner requested the Commission to approve the O & M expenses on actuals considering the significant increase in salaries and minimum wages.

Other Drivers affecting the O & M Expenses:

4.6.48 The Petitioner submitted that the Commission, in its various order, has time and again acknowledged the performance standards of the Company and also in its Order dated January 29, 2019 observed that NPCL is the best performing utility in U.P. having regard to observation of the Commission, the Company has been striving hard to control and optimize its O & M Expense primarily keeping the consumers interest in view.

4.6.49 The 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 Company. This in turn alleviate the expenditure on frequent breakdown and repair, resulting into more Repair and Maintenance expenses.

4.6.50 The Petitioner submitted that the Model Regulations provides for benchmarking the O & M Expenses of any Distribution Utility with its peers in the same State or outside State. Commission in its Tariff Order dated 14th October, 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."*

4.6.51 The 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 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.*

ACTUAL O&M EXPENSES OF NPCL COMPARED WITH BENCHMARKED EXPENSES AS SUBMITTED BY PETITIONER (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:*

1. *More than optimal utilization on the employees especially the breakdown teams*
2. *Higher dependence on reactive maintenance instead of preventive maintenance approach*
3. *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."

4.6.52 The Petitioner submitted that the above discussion significantly points out that it is no more feasible for the company to sustain the previous low-cost operation without compromising with service and safety standards. Therefore, the denial of justified expenses allowance to the Company would jeopardise the operational efficiency achieved by the Company over past 27 years. There is an urgent need for imminent allocation of higher O&M Cost to enable the Company to maintain and improve upon the service standards and prepare itself for growing requirement of the consumers servicing.

4.6.53 The Petitioner 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.

4.6.54 The Petitioner submitted that O&M Expenses of the Company are much lower as compared to other Distribution Utilities of U. P. as well Discoms of other States as shown in Table below:

TABLE 4-58: COMPARISON OF APPROVED O&M COST PER KWH SOLD AS SUBMITTED BY PETITIONER (RS. / KWH)

Rs./kWh

DISCOM	Volume - Latest	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
NPCL (Claimed)	2,376	0.42	0.44	0.52	0.52	0.55	0.52	0.59
NPCL (approved)	2,474	0.30	0.34	0.40	0.39	0.37	0.32	0.30
UTTAR PRADESH								
DVVNL	19,879	0.38	0.31	0.38	0.43	0.50	0.37	0.57
MVVNL	18,894	0.56	0.41	0.56	0.63	0.54	0.45	0.59
PVVNL	29,695	0.33	0.24	0.26	0.31	0.40	0.27	0.43
PuVVNL	23,539	0.56	0.40	0.49	0.58	0.63	0.47	0.65
KESCO	3,413	0.64	0.56	0.54	0.53	0.92	0.60	0.84
DELHI								
BYPL	6,411	0.71	0.74	0.86	1.05	0.96	1.08	1.21
BRPL	12,362	0.54	0.56	0.66	0.76	0.77	0.83	0.97
NDPL	9,205	0.61	0.65	0.82	0.82	0.71	0.84	0.89
NDMC	1,218	1.27	1.41	1.37	1.40	1.52	2.17	2.09
HARYANA								
UHVNL	18,491	0.76	0.56	NA	0.90	NA	0.87	0.87
DHVNL	25,652	0.39	0.41	NA	0.64	NA	0.72	0.71
MAHARASHTRA								
MSEDCL	1,15,063	0.69	0.67	0.72	0.68	0.73	0.68	0.63
R-Infra - D	10,545	1.09	1.29	1.15	1.25	1.25	1.26	1.28
BEST	4,684	1.15	1.19	1.09	1.09	1.26	1.22	1.24
KARNATAKA								
BESCOM	28,566	0.50	0.51	0.57	0.58	0.66	0.70	0.87
HESCOM	11,904	0.62	0.69	0.79	0.73	0.89	0.95	1.16
MESCOM	5,678	0.80	0.85	1.02	0.92	1.18	1.26	1.40
GESCOM	7,687	0.64	0.64	0.89	0.68	0.93	0.98	1.15
CESCOM	6,806	0.80	0.74	0.95	0.77	1.05	1.11	1.30
ORRISSA								
NESCO	4,801	1.05	1.06	NA	NA	0.88	0.90	1.03
WESCO	6,914	0.98	0.92	NA	NA	1.23	0.79	0.77
SOUTHCO	3,075	1.49	1.38	NA	NA	1.45	1.49	1.54
CESCO/CESU	7,160	1.13	1.13	NA	NA	1.02	1.12	1.16

(Source: Tariff Orders of respective SERCs)

4.6.55 The Petitioner stated that the benchmarking study 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: -

"O&M cost.

O&M COST PER UNIT OF SALE (RS. /KWH)

Utilities	*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*

Utilities	*FY 2013-14*	*FY 2014-15*	*FY 2015-16*
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*	*-*

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."

4.6.56 The Petitioner submitted that the O & M expenses of the Company 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 Company 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 Company has already started initiative in this regard which has also been acknowledged by the consultant viz. IMaCS. Therefore, it is submitted that O&M expenses may please be allowed in full as per audited accounts for FY 2020-21.

4.6.57 The Petitioner submitted that all the expenses the Company 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 in Table 21, 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 Company is much lesser as compared to other Discoms in the comparison. Hence, the Commission is requested to kindly take a holistic view in the matter and approve the actual, reasonable and genuine costs of the petitioner on actual basis.

4.6.58 The Petitioner submitted that the O & M expenses approved by the Commission in its Tariff Order dated 4th December, 2020 on normative basis in accordance with the Regulations-45 of MYT Regulations, 2019 is grossly insufficient as compared to actual expenses incurred by the Company. Therefore, It is humbly requested that the Commission may approve the O & M expenses for FY 2020-21 as actually incurred by the Company owing to various factors like minimum wages, High IT & automation expenses, increase in volumes, consumers numbers, office infrastructure etc.

Capitalization of Employee Cost

4.6.59 The Petitioner submitted that it has capitalized an amount of Rs. 9.82 Cr. out of the total employee cost of Rs. 56.29 Cr incurred during FY 2020-21, as per past practice duly approved by the Commission. In brief, for the purpose of capitalization of employee costs, the Company 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. It is pertinent to mention 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.

4.6.60 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.

4.6.61 On the basis of the aforesaid policy, approved and followed consistently over the years, the Petitioner submitted to the Commission to approve the capitalization of employee cost at Rs. 9.82 Crore during F Y 2020-21.

4.6.62 In view of the above the Petitioner requested the Commission to approve the net O&M expenses of Rs. 104.96 Crore for FY 2020-21.

Commission's Analysis:

4.6.63 As regards to O&M expenses, the Commission vide its deficiency letter dated December 31, 2021 sought detailed computation of O&M expenses for FY 2020-21 claim of Rs. 104.96 Crore towards O&M Expenses. The Licensee should reconcile the same with the Audited Accounts (under each head of O&M i.e. Employee, A&G, R&M). The Petitioner in response submitted the following below: -

Sl. No.	Description	Amount (Rs. Cr.)	Remark
1	Employee cost as shown in Audited Accounts for FY 2020-21	47.22	Please refer to Note-31 of Audited Accounts
2	Re-measurement of post-employment benefit obligations (as per Ind AS requirement)	(0.75)	Please refer to Statement of Profit & Loss in Audited Accounts
3	Other Expenses as shown in Audited Accounts for FY 2020-21	78.32	Please refer to Note-34 of Audited Accounts
4	**Total Operating Expenses as per Audited Accounts**	**124.79**	
Less: Items dealt with separately :			
5	Bad debts written off & provision for doubtful debts	(17.78)	Please refer to Note-34 of Audited Accounts
6	Loss on sale of Fixed Assets	(0.47)	Please refer to Note-34 of Audited Accounts
7	CSR Expenses	(0.17)	Please refer to Note-34 of Audited Accounts
8	GST Impact	(1.41)	Included under "Other Expenses" shown under Note-34 of Audited Accounts and claimed separately in Form F-50 of Appendix-II
10	**Gross O&M Expenses for True-up**	**104.96**	
Total may not tally due to rounding offs			

4.6.64 The Commission vide its deficiency letter dated December 31, 2021 sought justification and details of employees recruited for implementation of the Regulations along with the comparison of the employee till previous year and the impact of the same for FY 2020-21 in MS-Excel towards the NPCL submission that in view of the UPERC (Standard of Performance) Regulations, 2019 and Electricity (Rights of Consumers) Rules, 2020, it has recruited additional manpower leading to additional employee cost, A&G expenses and R & M Expenses.

4.6.65 In reply NPCL stated it 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 center 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 center 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. In this regard, it is submitted that cost of all these manpower and infrastructure are being claimed along with actual O&M expenses being similar in nature and it will be difficult to assign and allocate the same against one or another function. Therefore, as requested in our ARR petition to kindly approve the O&M expenses on actuals and alternatively allow 25% additional O&M expenses over and above the normative expenses as additional expenses towards compliance of SOP Regulations.

4.6.66 NPCL further submitted that the Commission vide its Tariff Order of FY 2021-22 dated July 29, 2021 for 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 extract of relevant para of above said Order dated July 29, 2021 of U.P. State DISCOMs is reproduced below:

Quote

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.

Unquote

4.6.67 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

4.6.68 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.

4.6.69 Further, 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 2021-22.

4.6.70 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 2020-21.

4.6.71 The Commission vide deficiency letter dated February 25,2022 sought item-wise full details of the R&M Expenses incurred for FY 2020-21 as per the Audited Accounts.

4.6.72 In reply NPCL submitted the item-wise details of the R&M Expenses incurred for FY 2020-21 as per the Audited Accounts as below: -

TABLE 4-59: COMPARISON OF DETAILS OF R&M EXPENSES* (FY 2020-21)

Sl. No.	Particulars	Amount
1	Repair & Maintenance of Distribution System Networks	32.69
2	Repair & Maintenance of Building, Machines and IT Assets etc.	5.81
3	Security and Maintenance of Substations	6.53
4	Insurance of Distribution System Network and Assets	1.39
5	Power and fuel expenses	0.10
	Total	**46.52**

**The above includes additional cost incurred towards the compliance of new / amended Regulations / directions of the Commission apart from similar expenses incurred and accounted for under the "Employee Expenses" and "Administration and General Expenses".*

4.6.73 The Commission approved O&M expenses as per the provisions of Regulation 45 of MYT Regulations, 2019. The Commission first arrived at Mid-Year i.e., FY 2017-18 value of each component of O&M Expenses based on the average of last 5

Trued-Up values of FY 2015-16 to FY 2019-20 and the computation of Norms for O&M Expenses of FY 2020-21 is provided in the Table below:

TABLE 4-60: O&M EXPENSES FOR FY 2020-21 COMPUTED BY THE COMMISSION FOR NPCL (RS. CRORE) (A)

Particulars	Trued-Up O&M Expenses (Without Efficiency Gains/Loss)					Normative	Normative	Normative
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18	FY 2018-19	FY 2019-20
	(a)	(b)	(c)	(d)	(e)	(g) = average of (a,b,c,d,e)	i= h*(1+escalation factor for FY 2018-19)	j= i*(1+escalation factor for FY 2019-20)
Employee Expenses	15.54	17.69	26.37	29.61	35.92	25.03	26.33	27.99
R & M Expenses	22.86	26.01	38.78	39.89	38.58	33.22	34.95	37.15
A&G Expenses	9.87	9.45	13.18	13.90	15.17	12.31	12.95	13.77
Gross O&M Expenses	**45.20**	**51.44**	**76.69**	**83.40**	**89.67**	**70.56**	**74.24**	**78.91**
Expenses Capitalised			10.34	8.99	10.32	9.88	8.99	10.32
Net O&M Expenses	**45.20**	**51.44**	**66.35**	**74.41**	**79.35**	**60.68**	**65.25**	**68.59**

4.6.74 Further, the average of past 5 years, provides a Mid- Year value (FY 2017-18) of each component of O&M expenses as shown in above Table. The same is 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. Accordingly, the Commission, has computed the O&M expenses of the base year which is escalated at Inflation / Escalation rate notified by Labour Bureau, Govt. of India (GoI) (http://labourbureau.gov.in/LBO_indexes.htm) and Economic Advisor Govt. of India (https://eaindustry.nic.in/) respectively for different years. The Commission has computed the WPI and CPI inflation rate as shown in the Table below:

TABLE 4-61: INFLATION INDEX FOR FY 2020-21 CONSIDERED BY THE COMMISSION

FY	Index		Inflation		60:40 Index	60:40 Index Inflation	Average of 3 years	
	WPI	CPI	WPI	CPI			WPI	CPI
FY 2017-18	114.88	284.42	2.92%	3.08%	216.60	3.05%	-	-
FY 2018-19	119.79	299.92	4.28%	5.45%	227.87	5.20%	-	-
FY 2019-20	121.80	322.50	1.68%	7.53%	242.22	6.30%	**2.96%**	**5.35%**
FY 2020-21	123.93	338.69	1.74%	5.02%	252.79	4.36%	2.57%	6.00%
FY 2021-22	139.37	355.44	12.46%	4.95%	269.01	6.42%	5.29%	5.83%

4.6.75 Accordingly, in terms of Regulations, the normative employee expenses for FY

2020-21 are computed by escalating the base year (FY 2019-20) employee expenses by average CPI inflation of last 3 years. The A&G expenses (including Finance Charges) and R&M expenses for FY 2020-21 are computed by escalating the base year (FY 2019-20) by average WPI inflation of last 3 years. The Commission for FY 2020-21 has considered the employee expense capitalisation same as claimed by the Licensees. The normative O&M expenses computed by the Commission are shown in the Table below:

TABLE 4-62: O&M EXPENSES FOR FY 2020-21 COMPUTED BY THE COMMISSION FOR NPCL (RS. CRORE) (B)

Sr. No.	Particulars	True-up	Actual CPI and WPI		True-up
		FY 2019-20			FY 2020-21
		Normative	WPI	CPI	Normative
1	Employee Expenses	27.99	-	5.35%	29.49
2	R & M Expenses	37.15	2.96%	-	38.25
3	A&G Expenses	13.77	2.96%	-	14.18
4	**Gross O&M Expenses (1+2+3)**	**78.91**	-	-	**81.92**
5	Expenses Capitalised	10.32	-	-	9.82
6	**Net O&M Expenses (4-5)**	**68.59**	-	-	**72.10**

4.6.76 Further, Regulation 8.2 (i) of MYT Regulations, 2019 specifies O&M expenses as Controllable Factors and Regulation 10 of MYT Regulations, 2019 specifies for treatment of 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

4.6.77 Accordingly, the Commission has approved each component of O&M expenses namely employee expenses, A&G expenses, and R&M expenses in True-Up as lower of the normative value and actual value, as shown in the Table below:

TABLE 4-63: O&M EXPENSES AS APPROVED BY THE COMMISSION FOR FY 2020-21 (RS. CRORE)

Particulars	Tariff Order for FY 2020-21 dated 04.12.2020	Audited Accounts	True Up Petition	Normative	Approved upon Truing up
Employee Expenses	24.94	56.29	56.29	29.49	29.49
Repair & Maintenance Expenses	34.97	45.43	45.43	38.25	38.25
Administrative and General Expenses	13.37	13.06	13.06	14.18	13.06
Gross O&M Expenses	**73.28**	**114.78**	**114.78**	**81.92**	**80.80**
Less:					
Employee Expenses Capitalized	9.00	9.82	9.82	9.82	9.82
Net O&M Expenses excluding GST Component	**64.28**	**104.96**	**104.96**	**72.10**	**70.98**

4.7 CAPITAL EXPENDITURE

4.7.1 The Petitioner has submitted that as per audited accounts for FY 2020-21, the actual capital expenditure incurred by the Company is Rs. 127.70 Crore (excluding consumer contribution and assets handed over by GNIDA & Others) vis-a-vis the capital expenditure of Rs. 171.84 Crore approved by the Commission vide its Tariff Order dated December 04, 2020 as given in the Table below:

TABLE 4-64: DETAILS OF CAPITAL EXPENDITURE FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER (RS. CRORE)

Particulars	Ref.	Approved	Actual
Total Additions to Assets	a	192.30	100.19
Add: Closing CWIP	b	-	73.46
Less: Opening CWIP	c	-	22.93
Capital Expenditure	**d=a+b-c**	**192.30**	**150.73**
Less: Assets Retired	e	5.90	3.06
Net Capex	**f=d-e**	**186.40**	**147.67**
Consumer Contribution	G	14.55	19.97
Net Capex	**h=f-g**	**171.84**	**127.70**
Note: Total may not tally due to rounding-off			

4.7.2 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 must have prior approval of the Commission on quarterly basis, and will be subject to prudence check.

Unquote

4.7.3 Accordingly, the item wise details of the capital expenditure projects of value exceeding Rs.10 Crore and the capital expenditure claimed by the Petitioner is towards the projects of value not exceeding Rs. 10 Crore, as given in the Table below:

TABLE 4-65: CAPITAL EXPENDITURE FOR FY 2020-21 AS SUBMITTED BY PETITIONER (RS. CRORE)

Sl. No.	Nature of Works	Approved	Actual
1	New Connections, Replacement Stock & Metering	**183.30**	30.11
2	Substations, Transformers, 33kV, 11 kV & LT Network		45.59
3	Process System Automation		5.16
4	IT Projects		9.81
5	Civil Works & Office Infrastructure Facility		9.37
6	Tools & Testing Equipment		0.03
7	Vehicles		0.14
8	**Sub-Total**	**183.30**	**100.19**
9	Interest Capitalisation	Included above	Nil
10	Salary Capitalisation	9.00	Included above
11	**Sub-Total**	**192.30**	**100.19**
12	Add: Assets taken over from GNIDA & Other Agencies	1.00	135.28
13	**Grand Total**	**193.30**	**235.47**
Note: Total may not tally due to rounding-off			

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 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 Petitioner further submitted that the above Capital Expenditure do not include any expenditure for the purpose of reduction of T&D Losses.

4.7.5 The Petitioner submitted 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.

4.7.6 The details of assets taken over from GNIDA and Others aggregating to Rs. 135.28 Crore during FY 2020-21 is provided in Table below:

TABLE 4-66: ASSETS HANDED OVER BY GNID & OTHERS FOR FY 2020-21 AS SUBMITTED BY PETITIONER (RS. CRORE)

Sl. No.	Asset Description	Actual
1	Switchgears, DCDB, RMU etc.	46.23
2	Tower, Poles & Fixtures	2.2
3	Conductors & Devices	0.24
4	Underground Cable & Ducts	58.86
5	Meter Board Panel etc.	3.01
6	Transformer	9.53
7	Civil work	15.21
	Total	**135.28**
	Note: Total may not tally due to rounding-off	

4.7.7 The Petitioner submitted that 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 2020-21, the details of the funding of the aforesaid capital expenditure is given in the Table below:

TABLE 4-67: DETAILS OF FUNDING OF CAPITAL EXPENDITURE FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER (RS. CRORE)

Particulars	Ref.	Approved	Actual
Total Additions to Assets	a	192.30	100.19
Add: Closing CWIP	b	-	73.46
Less: Opening CWIP	c	-	22.93
Capital Expenditure	**d=a+b-c**	**192.30**	**150.73**

Particulars	Ref.	Approved	Actual
Less: Assets Retired	e	5.90	3.06
Net Capex	**f=d-e**	**186.40**	**147.67**
Consumer Contribution	g	14.55	19.97
Net Capex	**h=f-g**	**171.84**	**127.70**
Debt - 70%	i=h x 70%	120.29	89.39
Equity- 30%	j=h x 30%	51.55	38.31
Note: Total may not tally due to rounding-off			

4.7.8 The Petitioner requested the Commission to approve the capital expenditure of Rs. 127.70 Crore for FY 2020-21 as well as funding thereof as submitted above.

Commission's Analysis:

4.7.9 The MYT Regulations, 2019 provide 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:

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

4.7.10 The Commission vide deficiency letter dated December 31, 2021 sought the detailed breakup of project/scheme wise capex approved in the Tariff Order dated December 04, 2020 vis-à-vis Capitalisation for each project /scheme along with justification for the variance, if any, to which the Petitioner has reiterated its submissions in the Petition. The Petitioner submitted that due to COVID-19 lockdown/restrictions the disruptions/derailments occurred in normal business activities including supply chain and hence, the actual capex was lower than the approved capex. The Commission also sought the clarification regarding the spill over schemes in the claimed capex to which the Petitioner has not submitted any reply.

4.7.11 The Commission vide deficiency letter dated December 31, 2021 sought detailed break-up of the Capex claimed/approved for FY 2020-21 under the following categories:

1. Capex required for expansion / new connection / network growth;
2. Capex required for loss reduction;
3. Capex required for any other work with details

4.7.12 In reply the Petitioner submitted following:

Sl. No.	Particulars	FY 2020-21	
		Approved	Actual
1	Capex required for expansion/ new connection/ network growth	192.30	85.07
2	Capex required for loss reduction		0.00
3	Capex required for any other work with details		15.13
	Total	**192.30**	**100.19**

4.7.13 The Commission vide deficiency letter dated December 31, 2021 sought confirmation if any Capital expenditure /additional towards 132/220 kV assets has not been claimed in the petition to which the Petitioner submitted that it has not incurred / claimed any capital expenditure/additional capitalisation for FY 2020-21 for any 132/220 kV assets.

4.7.14 The Commission vide deficiency letter February 11, 2022 sought details of asset addition made under the following Schemes: KP-I, KP-IV, RC Green, Gharbhara, Pali, Surajpur and KP-V. In reply, the Petitioner submitted the Capex incurred at the existing KP IV building is towards rainwater harvesting system/ Labour Cess and miscellaneous works such as window shades. The Capex incurred at the existing KPI Building is towards small room for placing Self-help Consumer Information Machine and miscellaneous woodwork, labour cess etc. The Capex incurred at the existing Surajpur is towards installation of FRTU in the meter room for facilitating periodic meter readings. Further, there has been no Capex incurred at R C Green, Gharbara, Pali and KP V location. The requisite details of assets capitalised during FY 2020-21 are provided in below table: -

TABLE 4-68: EXTRACT OF FIXED ASSET REGISTER SUBMITTED BY THE PETITIONER (RS.)

Asset No.	Asset Category	Asset Description	Quantity	Depreciation Rate	Date of Capitalisation	Gross Block (Opening)	Addition	Retirement	Gross Block (Closing)
12000087	Building & Structures	Civil Construction KP- 4 Office	11,308	W302	31-03-2018	10,41,28,881	12,05,568	-	10,53,34,449
12000088	Building & Structures	Civil Construction KP- 1 Office	5,575	W302	31-03-2018	5,00,27,000	7,65,440	-	5,07,92,440
12000118	Building & Structures	Civil Construction KP-4 Office	34	S3.3	28-02-2021	-	24,07,157	-	24,07,157
13000465	Building & Structures	Civil Work for Kiosk Room at KP-!	36	S3.3	31-03-2021	-	1,28,143	-	1,28,143
24000933	Plant & Machinery	FRTU for data acquisition at Surajpur	1	S5.2	31-03-2021	-	40,513	-	40,513
24000934	Plant & Machinery	Power pack for FRTU at Surajpur	3	S5.2	31-03-2021	-	15,694	-	15,694
26000678	Furniture & Fixtures	Woodwork Kp-1 Office	15	S6.3	28-02-2021	-	1,79,072	-	1,79,072
						15,41,55,881	**47,41,588**	**-**	**15,88,97,469**

4.7.15 The Commission observed that the Petitioner has purchased a Honda City ZX for Rs. 0.14 Crore and vide deficiency letter dated December 31, 2021 sought justification for purchase of such vehicle for core distribution business. In reply, the Petitioner submitted that the 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 Petitioner submitted that 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 that no power distribution utility can work without vehicles which are as basic & necessary as furniture, office equipment such as computers, printers etc. The Petitioner submitted that 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 km. The Petitioner submitted that the vehicles are purchased after detailed evaluation of the requirements and as per the policy of the NPCL and 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. The detail of vehicle during the FY 2020-21 is enclosed below:

Year	**Opening Balance**		**Addition during the Year**		**Retirement/ deletion during the Year**		**Closing Balance**	
	No.	**Rs. Cr.**	**No.**	**Rs. Cr.**	**No.**	**Rs. Cr.**	**No.**	**Rs. Cr.**
FY 2020-21	61	6.61	1	0.14	-	-	62	6.75

4.7.16 Further, 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 & necessary because this impacts the various components of ARR i.e. depreciation, ROE & 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. Accordingly, the Commission taking into consideration the views taken in the True Up of FY 2018-19 and FY 2019-20 disallows the amount of Rs. 0.14 Crore claimed towards the GFA addition under the asset class of ‘vehicles’ for FY 2020-21.

4.7.17 From the details of assets retired submitted by the Petitioner, the Commission observed that on most of the assets are decapitalised on November 02, 2020 or February 02, 2021. The Commission vide deficiency letter dated December 31, 2021 sought justification for the same. In reply, the Petitioner submitted that COVID-19 Pandemic related restrictions affected its business activities significantly and after the relaxation of restrictions in second half of FY 2020-21, the Company started basic activities involved in its normal course of business including retirement of assets and therefore, the decapitalisation was accounted on November 02, 2020 and February 02, 2021.

4.7.18 The Commission vide deficiency letter dated December 31, 2021 sought details breakup of CWIP for FY 2020-21 in excel. In reply, the Petitioner submitted as under:

TABLE 4-69: CWIP FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER (RS. CRORE)

Sl. No.	Scheme	FY 2020-21			
		Opening CWIP	Addition in CWIP	Capitalisation	Closing CWIP
1	Distribution Management System Project	1.50	-	1.40	0.10
2	Outage Management System Project	2.39	-	2.39	-
3	Building Management System Project	0.24	-	0.24	-
4	Customer Care Centre at Techzone-4	0.58	-	0.58	-
5	Survillance & Safety System Project	0.31	-	0.29	0.02
6	SAP Hana Project	3.77	3.61	-	7.38
7	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
8	Other IT and Automation Projects	0.12	-	0.11	0.00
9	Materials for various Capital Projects	10.83	7.77	10.83	7.77
10	Advance for 1 no. 33kV Bay	0.33	-	-	0.33
11	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.	-	54.66	-	54.66
12	Application Money paid to GNIDA for allotment of Lands for construction of 33/11 kV Substations and Other facilities.	0.76	0.27	-	1.03
13	Advance for Vehicles	0.14	-	0.14	-
14	Other Advances	0.67	0.22	-	0.89
	Total	**22.92**	**66.54**	**15.99**	**73.46**

4.7.19 The Commission vide deficiency letter February 11, 2022 sought details of various asset categories created through consumer contribution addition for FY 2020-21. In reply, the Petitioner submitted the details as given in the table below:

TABLE 4-70: CONSUMER CONTRIBUTION ADDITION FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER (RS. CRORE)

Sl. No.	Particulars	Amount
1	Distribution Network	9.65
2	Meters & Metering Equipment	10.32
3	Total	19.97

4.7.20 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

4.7.21 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.

4.7.22 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 NPCL, the Commission found that the total addition to 11 kV Network Development is Rs. 12.85 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 2020-21.

TABLE 4-71: NET IMPACT OF DISALLOWANCE CONSIDERED IN GFA FOR FY 2020-21 (RS. CRORE)

Particulars	Reference	Rs. Crore
Addition / Capitalisation (claimed during the year)	A	100.19
Disallowance of total vehicles in FY 2020-21	B	0.14
Addition / Capitalisation (claimed during the year)	C=A-B	100.05
Consumer contribution for FY 2020-21	D	19.97
Assets without Consumer Contribution	E=C-D	80.08
Disallowance of remaining assets (25%)	F=E*25%	20.02
Net Addition / Capitalisation (considered during the year including CC)	G=A-B-F	**80.03**

TABLE 4-72: GFA AFTER DISALLOWANCE OF VEHICLES FOR FY 2020-21 (RS. CRORE)

Particulars	Tariff Order for FY 2020-21 dated 04.12.2020	True Up Petition	Approved
Opening GFA	1313.06	1680.20	1273.21
Addition during the year	192.30	100.19	80.03
Retirement during the year	5.90	3.06	2.93*
Closing balance	1499.46	1777.33	1350.32

** Decapitalisation of Rs. 0.13 Crore of vehicle is not considered as there is no GFA towards vehicle in opening of FY 2020-21.*

4.7.23 Based on the above, the details of capital expenditure allowed by the Commission for FY 2020-21 as per the norms specified in MYT Regulations, 2019 are as shown in the Table below:

TABLE 4-73: DETAILS OF CAPEX FOR FY 2020-21 AS APPROVED BY THE COMMISSION (RS. CRORE)

Particulars	Reference	Tariff Order for FY 2020-21 dated 04.12.2020	True Up Petition	Approved
Opening CWIP	A	21.64	22.93	21.50
Investments	B	172.30	140.90	66.24
Employee Expenses Capitalised	C		9.82	9.82
A&G Expenses Capitalised	D		0	0
Interest Capitalisation on Interest on long term loans	E		0	0
Total Investments	F=A+B+C+D+E	**193.94**	**173.65**	**97.56**
Transferred to GFA (Total Capitalisation)	G	192.30	100.19	80.03
Closing CWIP	H=F-G	**1.64**	**73.46**	**17.52**

4.8 INTEREST AND FINANCE CHARGES

4.8.1 The Petitioner submitted that interest and Finance Charges covers the following cost elements: -

a) Interest on Long Term Loans;
b) Interest on Working Capital;
c) Interest on Consumer Security Deposits;
d) Finance Charges.

4.8.2 Each of the above elements are discussed separately below.

4.9 INTEREST ON LONG TERM LOANS

4.9.1 The Petitioner has submitted that the Commission in its Tariff Order dated December 04, 2020 has approved the interest on term loan at Rs. 52.06 Crore based on additional debt requirement of Rs. 120.29 Crore for FY 2020-21.

4.9.2 The Petitioner submitted that FY 2020-21 is the first year of the Control Period from FY 2020-21 to FY 2024-25 governed by MYT Regulations, 2019, and Regulation 20.2 of the MYT Regulations, 2019 is specifies as under:

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

4.9.3 The petitioner submitted that based on the above Regulation, the Debt and Equity at end of FY 2019-20 shall be considered as Opening Debt and Equity for FY 2020-21. Further, as the Company has filed Appeals against the Tariff Orders dated December 04, 2020 and August 26, 2021 before the Hon'ble APTEL, the opening balances of Debt and Equity have been considered as per True-up Petitions / submission for the respective years for determination of Interest on Term Loan for

FY 2020-21.

4.9.4 The Petitioner submitted that the summary of interest on Term Loan (normative) for FY 2020-21 based on above referred Opening Debt and Additional Debt Requirement of Rs. 89.39 Cr for FY 2020-21 is given in the Table below: -

TABLE 4-74: INTEREST ON TERM LOAN AS SUBMITTED BY THE PETITIONER FOR FY 2020-21 (RS. CRORE)

Sl. No.	Loan Computation	Ref.	Approved	Claimed in True Up
1	Gross Normative loan – Opening	a	880.12	1009.05
2	Cumulative repayment of Normative Loan - Opening	b	392.81	497.51
3	**Net Normative loan – Opening**	**c=a-b**	**487.31**	**511.54**
4	Increase/Decrease due to ACE during the Year	d	120.29	89.39
5	Repayments of Normative Loan during the year	e	44.58	49.95
6	**Net Normative loan – Closing**	**f=c+d-e**	**563.02**	**550.97**
7	Average Normative Loan	g=(c+f)/2	525.17	531.25
8	Weighted average Rate of Interest on actual Loans	h	9.91%	9.91%
9	**Interest on Normative loan**	**i=g x h**	**52.06**	**52.66**

4.9.5 The Petitioner submitted that the repayment of Normative Term Loans has been considered as equivalent to depreciation in accordance with Regulation 23 of the MYT Regulations, 2019.

4.9.6 The Petitioner further submitted 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

4.9.7 The Petitioner submitted that since the Company do not have any actual Term Loan outstanding during FY 2020-21, 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 term loans for FY 2020-21.

4.9.8 Accordingly, the total normative interest on Term Loan works out to Rs. 52.66 Crore for True-up ARR of FY 2020-21, which is submitted for the kind approval of the Commission.

Commission's Analysis

4.9.9 The Commission has considered debt equity ratio for the assets capitalized as 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 for approval of ARR in the Tariff Order for FY 2021-22. Further, as per the Regulation 23.5, the rate of interest on long term loan is considered as the weighted average rate of interest of the actual long term loan portfolio of the year. The relevant extract is provided in the following:

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

4.9.10 As per first proviso of Regulation 20.2 of MYT Regulations, 2019 to determine the equity capital the same shall be reduced to the extent of 30% or lower of the retirement or replacement or de-capitalisation of the assets.

4.9.11 As per Regulation 20.2 of MYT Regulations, 2019, for FY 2020-21, to determine the debt capital, the opening loan base as on April 01, 2020 shall be reduced to the extent of outstanding debt component of the fixed asset base computed as on March 31, 2020 or the normative closing loan base of FY 2019-20, whichever is lower.

4.9.12 The portion of capital expenditure financed through Consumer Contributions and grants has been separated as the depreciation thereon would not be charged to the consumers. Further, the allowable depreciation for the year has been considered for normative loan repayment.

4.9.13 For the purpose of arriving at the opening values of FY 2020-21, the Commission has adopted following approaches:

- Closing GFA for FY 2019-20 as approved by the Commission in the Tariff Order dated August 26, 2021 is considered as opening GFA for FY 2020-21;
- Reducing the opening consumer contribution as on April 01, 2020 from opening GFA as on April 01, 2020.
- GFA addition (Capitalisation) during the year i.e., FY 2020-21 is considered as approved.
- Asset deletion / adjustment is considered as per audited accounts of FY 2020-21.
- Interest Capitalisation on Interest on long term loans for FY 2020-21 is approved as per audited accounts of FY 2020-21 of NPCL;

4.9.14 As per the Regulation 23.2, the normative long- term loan outstanding as on April 01, 2020, shall be worked out by deducting the cumulative repayment as approved by the Commission up to March 31, 2020, from the gross normative loan.

4.9.15 Accordingly, the Commission has computed net opening loan for FY 2020-21, as shown in the Table below:

TABLE 4-75: NET OPENING LOAN FOR FY 2020-21 COMPUTED BY THE COMMISSION (RS. CRORE)

Particular	Reference	FY 2020-21
Opening GFA	A	1273.21
Opening Balance of Consumer contribution	B	186.12*
Net GFA	C=A-B	1087.09
Opening Equity	**D=30% of C**	**326.13**
Opening Loan	**E=C*70%**	**760.96**
Accumulated Net Depreciation	**F**	**347.20**
Net Opening balance of Loan	**G=E-F**	**413.76**

** Refer Table 6.49 of Tariff Order of FY 2021-22 dated 26.08.2021*

4.9.16 Further, as per Regulation 20.2, the debt capital i.e., opening loan base as on April

1, 2020 shall be reduced to the extent of outstanding debt component of the fixed asset base computed as on March 31, 2020 or the closing loan base of FY 2019-20 as approved by the Commission in the Tariff Order for FY 2021-22, whichever is lower, as shown in the Table below:

Particular	Closing of FY 2019-20 approved in Tariff Order of FY 2021-22 dated 26.08.2021	Computed by the Commission	Opening debt capital Considered for FY 2020-21
	A	B	C = Lower of (A, B)
Normative Opening Loan as on 01.04.2020	374.74	413.76	374.74

4.9.17 The portion financed through Consumer Contributions has been separated as the depreciation thereon would not be charged to the consumers. Further, the allowable depreciation for the year has been considered for normative loan repayment. Further, the Commission has considered the capitalization of interest expenses same as per the audited account.

4.9.18 Since there is no actual loan, the interest rate has been considered as allowed by the Commission in true-up of FY 2019-20.

4.9.19 The computations for interest on long term loan are shown in tables below:

TABLE 4-76: INTEREST ON LONG TERM LOAN FOR NPCL FOR FY 2020-21 (RS. CRORE)

Sl. No.	Loan Computation	Formula	Approved in TO of FY 2020-21 dated 04.12.2020	True Up Petition	Approved
1	Gross Normative loan - Opening	a	-	1009.05	721.85
2	Cumulative repayment of Normative Loan - Opening	b	-	497.51	347.11
3	**Net Normative loan - Opening**	**c=a-b**	**487.31**	**511.54**	**374.74**
4	Net Increase/Decrease due to ACE during the Year (70% of Net GFA Addition after deducting Consumer contribution and asset deletion)	d	120.29	89.39	40.00
5	Repayments of Normative Loan during the year	e	44.58	49.95	33.90
6	**Net Normative loan - Closing**	**f=c+d-e**	**563.02**	**550.97**	**380.83**
7	Average Normative Loan	g=(c+f)/2	525.17	531.25	377.79
8	Weighted average Rate of Interest on actual Loans	h	9.91%	9.91%	9.91%
9	**Interest on Normative loan**	**i=g x h**	**52.06**	**52.66**	**37.45**

4.10 INTEREST ON WORKING CAPITAL

4.10.1 The Petitioner submitted that as per Regulation 25.2 of the MYT Regulations, 2019 provides 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."

(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

4.10.2 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 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 further submitted that the Commission in its Tariff Order dated December 04, 2020 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. In the above Order, the Commission observed 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 submitted that as regards, the Commission may refer the 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

4.10.5 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 Company to the consumers along with the other charges for electricity. Therefore, the same is integral part of the revenue and hence, the receivables of the Company.

4.10.6 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 the Commission's own earlier practice.

4.10.7 The Petitioner submitted its computation of interest on working capital for FY 2020-21 as shown in the Table below: -

TABLE 4-77: INTEREST ON WORKING CAPITAL FOR FY 2020-21 AS SUBMITTED BY PETITIONER (RS. CRORE)

Particulars	Approved	Claimed in True Up
O&M expenses for 1 month	5.36	8.86
One-&-half-month equivalent of expected revenue from distribution tariff	204.88	236.64
Maintenance spares @ 40% of R&M expenses for two month's	2.33	3.03
Gross Total	212.57	248.54
Security Deposits from Consumers		
Opening Balance	260.11	260.11
Received during the year (Net of Refunds)	10.00	14.37
Closing Balance	**270.11**	**274.48**
Average Security Deposit	**265.11**	**267.30**
Less: Security Deposit with UPPCL	11.28	11.28
Net Security Deposits from Consumers	**253.83**	**256.02**
Net Working Capital	**-**	**-**
Applicable Rate of Interest for Working Capital (SBI - 1Year MCLR + 2.50%)	10.65%	9.57%
Interest on Total Working Capital	-	-

4.10.8 The Petitioner submitted that as per the practice followed by the Commission in its various Tariff Orders of the Company, latest being 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 Company while computing working capital requirement as the same are not available at the disposal of the Company for meeting its working capital requirements.

4.10.9 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.

Commission's Analysis

4.10.10 The Commission observed that the Petitioner, while computing one and half month's revenue for interest on Working capital has considered the revenue as Rs. 2129.76 Crore, which include the electricity duty and has been multiplied by the factor of 1.075, whereas Note 28 of the Audited Accounts provides the revenue as Rs. 1677.18 Crore. The Commission vide deficiency letter dated December 31,2022 sought justification from Petitioner and directed to revise the submission as per the MYT Regulations, 2019 and recalculate the ARR. In reply to the Commission's query the Petitioner submitted that the Note-28 of the Audited Accounts shows Revenue excluding Electricity Duty as 1,677.18 Crore and Revenue including Electricity Duty as Rs. 1761.06 Crore.

4.10.11 The Petitioner submitted that Section 4A of the U. P. Electricity (Duty) Act, 1952 provides as under:

Quote

> *4-A. Reimbursement of electricity duty from consumers*
>
> *(2)* ***<u>For the purpose of recovering the amount of electricity duty from the consumer, the licensee</u>*** *or the appointed authority, as the case may be, may without prejudice to any other mode of recovery,* ***<u>exercise the power</u>*** *conferred on the licensee under sub-section (1) of the Section 24 of the Indian Electricity Act, 1910 (Act no, IX of 1910),* ***<u>as if the duty were</u>*** *a charge or* ***<u>sum due in respect of energy supplied to such consumer</u>****.*

Unquote

4.10.12 The Petitioner submitted that in view of the above provisions of 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 Company to the consumers along with the other charges for electricity. Therefore, the same is integral part of the revenue and hence, the receivables of the Company. Accordingly, the Company has considered the Revenue including Electricity Duty of Rs. 1,761.06 Crore for the purpose of determination of working capital. The Petitioner requested the Commission to consider the Electricity Duty as part of Receivable for determination of Interest on Working Capital for True-up of ARR for FY 2020-21.

4.10.13 The Petitioner further submitted that the due to inadvertent application of multiplying factor of 1.075, the revenue for the purpose of computation of working capital interest was taken as Rs. 1,893.14 Crore, and not Rs. 2129.76 Crore as noted by the Commission, instead of correct amount of Rs. 1761.06 Crore only. The Petitioner submitted that the above inadvertent error has no consequential impact on ARR for FY 2020-21 as the Company has claimed “Nil” interest on working capital for FY 2020-21. Hence, the ARR for FY 2020-21 as submitted by the Company for True Up will remain the same.

4.10.14 The Commission is of the view that the MYT Regulations, 2019 provides for revenue for one and a half months and such revenue does not include the Electricity duty. Also, the Electricity duty is the domain of GoUP and is not a part of the ARR or Revenue of the Petitioner in its regulatory accounts. Therefore, the Commission has considered the revenue for the purpose of interest on working capital as provided in Note-28 of the Audited Accounts for FY 2020-21 net of Electricity Duty.

4.10.15 As per the provisions of the aforesaid Regulations, the Commission for the purpose of computing Interest on Working Capital for FY 2020-21 has considered SBI MCLR (1 Year) on plus 250 basis point i.e., 9.57%. (Source: https://www.sbi.co.in/web/interest-rates/interest-rates/mclr-historical-data).

4.10.16 In the Truing up Petition for FY 2020-21, the Petitioner has considered the security deposit passed to UPPCL amounting to Rs. 11.28 Crore. Such amount has been deducted while computing the total working capital requirement for FY 2020-21, as had been done in previous years.

4.10.17 The Commission has worked out the Working Capital and Interest on Working Capital for FY 2020-21 as given in table below:

TABLE 4-78: INTEREST ON WORKING CAPITAL AS APPROVED BY THE COMMISSION FOR FY 2020-21 (RS. CRORE)

Particulars	Tariff Order for FY 2020-21 dated 04.12.2020	True -up Petition	Approved
One month's O & M Expenses	5.36	8.86	5.91
Maintenance spares @ 40% of R&M expenses for two months	2.33	3.03	2.55
One & half month equivalent of expected revenue from charges for use of Distribution systems at the prevailing Tariff (excluding electricity duty)	204.88	236.64	209.65
Gross Total	**212.57**	**248.54**	**218.11**
Opening Balance	260.11	260.11	260.11
Received during the year	10.00	14.37	14.37
Closing Balance	270.11	274.48	274.48
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	253.83	256.02	256.02
Net Working Capital	**(41.26)**	**0.00**	**(37.91)**
Rate of Interest for Working Capital	**10.65%**	**9.57%**	**9.57%**
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 Regulation, 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 December 04, 2020 has approved the Interest on Security Deposit @ 4.65% p.a. being RBI’s Bank Rate prevailing on the April 01, 2020.

4.11.2 The Petitioner submitted that the actual interest on consumer security deposit for FY 2020-21 on the basis of each individual customer’s outstanding security deposit on daily balance basis and the tenure for which the same was outstanding works out to Rs. 12.60 Crore as summarised in below:

TABLE 4-79: INTEREST ON SECURITY DEPOSIT AS SUBMITTED BY THE PETITIONER FOR FY 2020-21 (RS. CRORE)

Particulars	Ref.	Approved	Actual
Opening Balance of Security Deposit	a	260.11	260.11
Addition During the year	b	10.00	14.37

Particulars	Ref.	Approved	Actual
Closing Balance for Security Deposit	c=a+b	270.11	274.48
Average Balance for Security Deposit	**d=(a+c)/2**	**265.11**	**267.30**
Rate of Interest	e	4.65%	4.72%
Interest payable on Security Deposit	**f=dxe**	**12.33**	**12.60**

4.11.3 The Petitioner submitted 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. 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.

4.11.4 The Petitioner further submitted that the aforesaid interest on security deposit has been duly audited by the Statutory Auditors of the Company with respect to its provision and computation. Therefore, the Petitioner requested the Commission to consider interest on security deposit actually paid to consumers amounting to Rs. 12.60 Crore.

Commission's Analysis

4.11.5 In this regard, the relevant provision of 25.2 of Distribution Business of UPERC (Multi Year Tariff for Distribution and Transmission) Regulations, 2019 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

4.11.6 The Commission vide its deficiency letter dated December 31, 2021 sought details regarding the amount paid to the consumers w.r.t. Consumer Security Deposit for FY 2020-21 from Petitioner. In reply to the query raised by the Commission, the Petitioner submitted the following:

Particular	**Apr-20**	**May-20**	**Jun-20**	**Jul-20**	**Aug-20**	**Sep-20**	**Oct-20**	**Nov-20**	**Dec-20**	**Jan-21**	**Feb-21**	**Mar-21**	**Amount (Rs. Crs.)**
Opening Balance	260.11	261.55	262.72	264.79	267.53	269.05	269.80	271.49	272.56	273.60	274.35	275.43	260.11
Addition during the month	1.43	1.18	2.37	2.82	1.53	1.07	1.81	1.10	1.45	0.79	1.13	1.41	18.08
Deduction during the month	-	-	0.31	0.07	0.01	0.32	0.12	0.02	0.41	0.05	0.04	2.36	3.71
Closing balance	**261.55**	**262.72**	**264.79**	**267.53**	**269.05**	**269.80**	**271.49**	**272.56**	**273.60**	**274.35**	**275.43**	**274.48**	**274.48**
Interest Rate (%)	4.65%	4.65%	4.65%	4.65%	4.65%	4.65%	4.65%	4.65%	4.65%	4.65%	4.65%	4.65%	-
Interest on Security Deposit disbursed by the Licensee as per Regulations	**1.01**	**1.02**	**1.02**	**1.03**	**1.03**	**1.05**	**1.06**	**1.06**	**1.07**	**1.07**	**1.07**	**1.11**	**12.60**
Interest on Security Deposit actually disbursed to Consumers	**1.01**	**1.02**	**1.02**	**1.03**	**1.03**	**1.05**	**1.06**	**1.06**	**1.07**	**1.07**	**1.07**	**1.11**	**12.60**
Difference to be disbursed	-	-	-	-	-	-	-	-	-	-	-	-	-

4.11.7 The Commission vide deficiency letter dated June 20, 2022 sought working of interest on consumer security deposit for FY 2020-21. In reply to the Commission query the Petitioner submitted that Regulation 25.2(c) of the MYT Regulation, 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 December 04, 2020 has approved the Interest on Security Deposit @ 4.65% p.a. being RBI's Bank Rate prevailing on the April 01, 2020.

4.11.8 Actual interest on consumer security deposit for FY 2020-21 on the basis of each individual customer's outstanding security deposit on daily balance basis and the tenure for which the same was outstanding works out to Rs. 12.60 Crore as summarised in below Table:

Period	**Opening**	**Addition**	**Deletion**	**Closing**	**Average**	**Interest Rate**	**Interest. Amount**	**Actual Paid**	**Variance**
	A	**B**	**c**	**d=a+b-c**	**e=(a+d)/2**	**f**	**g=e x f**	**h**	**i=h-g**
Apr-Jun'20	260.11	4.98	0.31	264.79	262.45	4.65%	3.04	3.05	0.01
Jul-Sep'20	264.79	5.42	0.40	269.80	267.30	4.65%	3.13	3.12	(0.01)
Oct-Dec'20	269.80	4.35	0.56	273.60	271.70	4.65%	3.18	3.19	0.00
Jan-Mar'21	273.60	3.33	2.44	274.48	274.04	4.65%	3.14	3.24	0.10
Total	**260.11**	**18.08**	**3.71**	**274.48**	**267.30**	**4.65%**	**12.50**	**12.60**	**0.10**

Period	Opening	Addition	Deletion	Closing	Average	Interest Rate	Interest. Amount	Actual Paid	Variance
	A	B	c	d=a+b-c	e=(a+d)/2	f	g=e x f	h	i=h-g
Approved	**260.11**	**10.00**	**-**	**270.11**	**265.11**	**4.65%**	**12.33**	**-**	**-**

4.11.9 The Petitioner submitted 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.

4.11.10 The Petitioner stated aforesaid interest on security deposit has been duly audited by the Statutory Auditors of the Company with respect to its provision and computation. Therefore, the Petitioner requested the Commission to consider interest on security deposit actually paid to consumers amounting to Rs. 12.60 Crore in full.

4.11.11 The Commission based on the submission of the Petitioner approved interest consumer security deposits as claimed by the Petitioner.

TABLE 4-80: INTEREST ON CONSUMER SECURITY DEPOSIT APPROVED BY THE COMMISSION FOR FY 2020-21 (Rs. CRORE)

Particulars	Approved in TO dated 04.12.2020	Petition	Approved
Interest on Security Deposit	**12.33**	**12.60**	**12.60**

4.12 FINANCE CHARGES

4.12.1 The Petitioner submitted that it has incurred various finance charges for availing of financial products and services for the purpose of meeting its financial and other business needs. These charges are genuine business expenditure and has been explained in details as under:

Loan Processing Charges:

4.12.2 The Petitioner submitted that it has negotiated a number of facilities in preceding years and also estimated the requirement for ensuing year. During, FY 2020-21, the

Company has incurred expenses aggregating to Rs. 0.19 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.

Credit Rating Charges:

4.12.3 The Petitioner submitted that credit rating of banking facilities (Fund / Non-Fund based) 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 Petitioner has been getting its credit rating from India Rating & Research (P) Limited.

Collection facilitation charges

4.12.4 The Petitioner submitted that, in continuation of 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. Commission has also vide its order dated May 29, 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 up to 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.

Other Finance Charges:

4.12.5 The Petitioner submitted that 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."*

4.12.6 Thus, in FY 2020-21, the Petitioner incurred additional expenses to issue Letter of Credit in favor of Generating Companies.

Total Finance Charges

4.12.7 The summary of the Finance Charges as approved and actually incurred during FY 2020-21 is provided in Table below: -

TABLE 4-81: FINANCE CHARGES FOR FY 2020-21 AS SUBMITTED BY PETITIONER (RS. CRORE.)

Sl. No.	Financing Activity	Approved	Claimed in True Up
1	Processing Fee	Included in O&M Expenses	0.19
2	Credit Rating Charges		0.02
3	Collection Facilitation Charges		0.95
4	SBLC & Other Finance Charges		0.07
	Total	**-**	**1.23**

4.12.8 Therefore, all the charges have been incurred to meet the ongoing funding requirement of the Company and are well within the approved limits. Hence, the Petitioner requested the Commission to approve the same in full.

Total interest & Finance Cost

4.12.9 The summary of total interest and finance charges incurred during FY 2020-21 claimed by the Petitioner is as given in the Table below: -

\TABLE 4-82: TOTAL INTEREST AND FINANCE CHARGES FOR FY 2020-21 AS SUBMITTED BY PETITIONER (RS. CRORE.)

Sl. No.	Description	Approved	Actual
1	Interest on Long term loans	52.06	52.66
2	Interest on working capital facilities	-	-
3	Interest on security deposit	12.33	12.60
4	Finance Charges	-	1.23
5	Total Interest & Fin. Chg.	64.39	66.49

4.12.10 Keeping the above in view, the Petitioner has requested the Commission to approve above interest and finance charges as claimed.

Commission's Analysis

4.12.11 The Commission observed that the Petitioner has claimed Rs. 1.23 Crore as finance charges for FY 2020-21. Regulation 45.3 of MYT Regulations, 2019 specifies that the financing charges shall be part of A&G expenses. The Commission had considered the financing charges as part of A&G expenses while deriving the normative expenses for FY 2020-21 and hence the claim of finance charges is not allowable.

TABLE 4-83: FINANCE CHARGES FOR FY 2020-21 AS APPROVED BY THE COMMISSION (RS. CRORE.)

Particulars	Tariff Order for FY 2020-21 dated 04.12.2020	Petition	Approved
Processing Charges	-	0.19	0.00
Credit Rating Charges	-	0.02	0.00
Collection Facilitation Charges	-	0.95	0.00
LC & Other Finance Charges	-	0.07	0.00
Total Finance Charges	**-**	**1.23**	**0.00**

4.12.12 The summary of Interest and Finance Charges Trued-Up by the Commission for FY 2020-21 is given in the Table below:

TABLE 4-84: TOTAL INTEREST AND FINANCE CHARGES FOR FY 2020-21 AS APPROVED BY COMMISSION (RS. CRORE.)

Particulars	Approved in TO dated 12.04.2020	Petition	Approved
Interest on Long term loans	52.06	52.66	37.44
Interest on short term loans/working capital	0.00	0.00	0.00
Finance charges	0.00	1.23	0.00
Interest on security deposit	12.33	12.60	12.60
Total Interest & Finance charges	64.38	66.49	50.05
Less: Interest capitalization	0.00	0.00	0.00

Particulars	**Approved in TO dated 12.04.2020**	**Petition**	**Approved**
Net Interest & Finance charges	**64.38**	**66.49**	**50.05**

4.13 GROSS FIXED ASSETS (GFA) AND DEPRECIATION

4.13.1 The Petitioner stated that in accordance with claimed Capital Expenditure, the computation of GFA is given in Table below: -

TABLE 4-85: GROSS FIXED ASSETS AS SUBMITTED BY THE PETITIONER FOR FY 2020-21 (RS. CRORE)

Sl. No.	**Description**	**Approved**	**Actual**		
			GFA till 01.04.2020	**GFA added after 01.04.2020**	**Closing GFA FY 2020-21**
1	Opening Balance	1,313.06	1,680.20#	-	1680.20
2	Addition during the Year	192.30	-	100.19	100.19
3	Retirement during the Year	5.90	3.06	-	3.06
4	Closing Balance	1,499.46	1677.14	100.19	1,777.33
** Excluding assets taken over from GNIDA & DMIC etc.* *# As per Company's True-up Petitions / submissions*					

4.13.2 The Petitioner submitted that above GFA does not include the assets handed over by other agencies such as GNIDA, UPSIDC, DMIC etc. for distribution of electricity to its consumers and maintenance thereof.

4.13.3 Further, the Commission vide its Tariff Order dated December 04, 2020 has directed the Company to maintain separate individual asset wise FAR for assets capitalised after 1.4.2020 so that the Gross Block and Depreciation may be computed separately from the Gross Block before 1.4.2020. In this regard is the Petitioner submitted that the Company 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 upto 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 Company 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.

4.13.4 Accordingly, based on above GFA, the summary of Depreciation is given in Table below:

Sl. No.	Description	Ref	Approved	Actual
1	Depreciation on Gross Block till 01.04.2020	**a**	54.46	57.16
2	Depreciation on Gross Block after 01.04.2020	**b**		2.88
3	**Gross Depreciation for the Year**	**c=a+b**	**54.46**	**60.04**
4	Less: Depreciation on Consumer Contribution	d	9.88	10.09
5	**Total**	**e=c-d**	**44.58**	**49.95**
6	Average GFA	f	1,406.26	1,728.77
7	Weighted Average Depreciation Rate	g=e/f	3.87%	3.47%

4.13.5 The depreciation of Rs. 60.04 Crore has been computed as per the methodology adopted by the Commission in its tariff order of FY 2020-21 dated December 04, 2020 with GFA bases as per the Company's submissions for Truing up. Therefore, this amount may not tally with the depreciation amount as shown in audited accounts. The Company has considered the depreciation at the rates as prescribed in Annexure-A of the MYT Tariff Regulations, 2019 on SLM method for finalization of its Audited Accounts for FY 2020-21.

Commission's Analysis:

4.13.6 The Commission vide deficiency letter dated April 26, 2022 had directed the Petitioner to submit the compliance of Tariff Order for FY 2020-21 dated December 12,2020 as below:

Quote

> *5.8.6 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 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.

Unquote

4.13.7 In reply the Petitioner submitted as under:

Quote

8. GROSS FIXED ASSETS (GFA) AND DEPRECIATION

8.1 As submitted above, in accordance with the Capital Expenditure as described above in Paragraph-6, the computation of GFA is given in Table- below:

Table-33: Gross Fixed Assets (FY 2020-21)*

(Rs. Cr.)

Sl. No.	Description	Approved	Actual		
			GFA till 01.04.2020	GFA added after 01.04.2020	Closing GFA FY 2020-21
1	Opening Balance	1,313.06	1,680.20#	-	1680.20
2	Addition during the Year	192.30	-	100.19	100.19
3	Retirement during the Year	5.90	3.06	-	3.06
4	Closing Balance	1,499.46	1677.14	100.19	1,777.33

** Excluding assets taken-over from GNIDA & DMIC etc.*
 # As per Company's True-up Petitions / submissions

……..

8.3 *Further, Hon'ble Commission vide its Tariff Order dt. 4th December, 2020 has directed the Company to maintain separate individual asset wise FAR for assets capitalised after 1.4.2020 so that the Gross Block and Depreciation may be computed separately from the Gross Block before 1.4.2020. In this respect it is submitted that the Company 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% 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 Company 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 Hon'ble Commission for separate computation of Depreciation on Gross Block.***

8.4 Accordingly, based on above GFA, the summary of Depreciation is given in Table-34 below: -

Table 34 : Depreciation (FY 2020-21)

(Rs. Cr.)

Sl. No.	***Description***	***Ref***	***Approved***	***Actual***
1	*Depreciation on Gross Block till 01.04.2020*	***a***	*54.46*	*57.16*
2	*Depreciation on Gross Block after 01.04.2020*	***b***		*2.88*
3	***Gross Depreciation for the Year***	***c=a+b***	***54.46***	***60.04***
4	*Less: Depreciation on Consumer Contribution*	*d*	*9.88*	*10.09*
5	***Total***	***e=c-d***	***44.58***	***49.95***
6	*Average GFA*	*f*	*1,406.26*	*1,728.77*
7	*Weighted Average Depreciation Rate*	*g=e/f*	*3.87%*	*3.47%*

*8.5 The above-mentioned depreciation of Rs. 60.04 Cr has been computed as per the methodology followed by the Hon'ble Commission in its tariff order dated 4th December, 2020 with GFA bases as per the Company's submissions for Truing up. <u>Therefore, this amount may not tally with the depreciation amount as shown in audited accounts for FY 2019-20.</u> The **Company 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 Audited Accounts for FY 2020-21.**"*

4.13.8 The Petitioner, submitted that in line with Regulation 21.1 and 21.2 of the MYT

Regulation, 2019, Depreciation has been computed on Straight Line Method (SLM) at the rates stipulated in the Annexure-A to the MYT Regulation, 2019 for the new assets capitalised from April 01, 2020 onwards and for the existing assets their net block as on March 31, 2020 has been considered as Gross Block to apply SLM from April 01, 2020 onwards. Accordingly, as directed by the Commission, separate individual asset wise details for assets capitalised after April 01, 2020 is duly maintained by the Company in SAP-ERP.

4.13.9 The Commission has approved the GFA for FY 2020-21 as discussed in Capex section for truing-up and the same is shown below:

TABLE 4-86: GROSS FIXED ASSETS AS APPROVED BY THE COMMISSION FOR TRUE-UP OF FY 2020-21 (RS. CRORE)

Particulars	Approved in TO dated 12.04.2020	Petition	Approved
Opening Balance	1313.06	1680.20	1273.21
Addition during the year	192.30	100.19	80.03
Retirement during the year	5.90	3.06	2.93
Closing Balance	1499.46	1777.33	1350.32

4.14 DEPRECIATION

4.14.1 The Petitioner submitted that in accordance with Regulation 21.1 and 21.2 of MYT Regulations, 2019, it has provided Depreciation on Straight Line Method (SLM) at the rates stipulated in the Annexure-A to the MYT Regulations, 2019 for the new assets capitalised from 1st April, 2020 onwards and for the existing assets their net block as on 31st March, 2020 has been considered as Gross Block to apply SLM from 1st April, 2020 onwards. Accordingly, as directed by the Commission, separate individual asset wise details for assets capitalised after 1st April, 2020 is duly maintained by the Company in SAP-ERP.

4.14.2 The Regulation 21 of the MYT Regulations, 2019 provides that:

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

4.14.3 The Commission observed that the Petitioner has claimed Depreciation as Rs. 60.04 Crore in the format F30 which is hard punched but in the Annexure 18 submitted along with the petition, the depreciation arrived as per FAR is 59.69 Crore against the Rs. 60.04 Crore claimed in the Petition. The Commission vide deficiency letter dated December 31, 2021 sought detailed justification for the variance and reconciliation for the same. In reply, the Petitioner submitted following table:

Sl. No.	Description	Amount (Rs. Cr.)	Remark
Depreciation as per Audited Accounts			
1	Depreciation of property, plant and equipment	55.18	Note-33 of Audited Accounts
2	Amortisation of intangible assets	4.51	Note-33 of Audited Accounts
	Subtotal	**59.69**	
3	Less: Depreciation on assets acquired from consumer contribution	10.09	Fixed Asset Register for FY 2020-21
4	**Net Depreciation**	**49.60**	
Depreciation as per ARR			
5	Depreciation Computed as per the methodology followed in Tariff Order	60.04	Enclosed herewith as **Annexure-10**
6	Less: Depreciation on assets acquired from consumer contribution	10.09	Fixed Asset Register for FY 2020-21
7	**Net Depreciation**	**49.95**	Please refer Form F-1
Total may not tally due to rounding offs			

4.14.4 The Commission vide deficiency letter dated December 31, 2021 sought detailed computation of the depreciation on the assets added during the year considering the actual date of capitalisation and relevant depreciation rates as per the MYT regulations, 2019. The Commission also directed the Petitioner to submit the excel model for the same in the format of FAR submitted as annexure 18 to the petition.

In reply, the Petitioner submitted that, the Company maintains its Fixed Asset Register in renowned SAP-ERP system. The details of each fixed assets have been entered into the SAP-ERP and the applicable Depreciation Rate, Method & Extent as provided in UPERC Multi Year Tariff Regulations, 2014 has been defined as parameter in the SAP- ERP. Hence, the Depreciation is computed by the SAP-ERP system as per the rates defined in UPERC Multi Year Tariff Regulations, 2019 upto the maximum limit of 90% except for small items having value upto Rs. 5,000/- which are depreciated upto 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 Company 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. Since, Depreciation is computed by the SAP-ERP on the basis of defined parameters, accordingly, the details in RTF are submitted based on the report extracted from the FAR maintained in SAP_ERP.

4.14.5 The Petitioner submitted that the Company has considered the depreciation at the rates as prescribed in Annexure-A of the UPERC MYT Tariff Regulation, 2019 except Solar power generation equipment being depreciated as per the rates and in the manner prescribed under Central Electricity Regulatory Commission (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations 2009.

4.14.6 The Commission directed the Petitioner to maintain a separate individual asset wise Fixed Asset Register (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 to maintain 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 for Regulatory Accounts.

4.14.7 As per above, the Commission has computed the depreciation. The Written Down closing of FY 2019-20 is considered as Opening for FY 2020-21, the gross allowable depreciation for each component is totalled and the equivalent depreciation on assets created out of Consumer Contributions, capital grants and subsidies are deducted as shown under:

TABLE 4-87: OPENING GFA FOR FY 2020-21 COMPUTED BY THE COMMISSION (RS. CRORE)

Particulars	Formula	FY 2019-20
Opening GFA	A	1,169.44
Cumulative Depreciation	B	403.15
Written Down Opening	C=A-B	767.58#
Additions to GFA	D	111.63
Deductions to GFA	E	7.02
Total Closing GFA	F=C+D-E	872.19
Gross Allowable Depreciation	G	53.73
Less: Consumer Contribution	H	12.72
Net Allowable Depreciation	**I=G-H**	**41.01**
Opening WDV for FY 2020-21 (Closing GFA i.e. 872.19 minus net allowable Depreciation i.e. 53.73)	**J=F-G**	**818.46**

**Refer Table 4-100 of Tariff Order of FY 2021-22 dated 26.08.2021*

TABLE 4-88: GROSS ALLOWABLE DEPRECIATION FOR ASSETS UPTO March 31, 2020 OF NPCL FOR FY 2020-21 (RS. CRORE) (PART- A)

S. No	Particulars	Written-down Value of Assets (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	34.20	0.00	0.05	34.15	34.18	5.28%	1.80
4	Lines & Cables	495.92	0.00	1.41	494.50	495.21	5.28%	26.15
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	0.00	9.18	9.18	6.33%	0.58
8	Metering Equipment	36.52	0.00	1.01	35.52	36.02	5.28%	1.90
9	Communication Equipment	10.53	0.00	0.46	10.08	10.31	5.28%	0.54
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 Equipments	0.17	0.00	0.00	0.17	0.17	5.28%	0.01
13	**Total Fixed Assets**	**818.46**	**0.00**	**2.93**	**815.54**	**817.00**	-	-

S. No	Particulars	Written-down Value of Assets (Opening GFA)	Addition to GFA	Deduction to GFA	Closing GFA	Average GFA	Depreciation Rate	Allowable Gross Depreciation
14	Non depreciable assets (Freehold land)	3.92	0.00	0.00	3.92	3.92	-	-
15	**Depreciable assets**	**814.54**	**0.00**	**2.93**	**811.62**	**813.08**	**5.13%**	**41.72**

TABLE 4-89: GROSS ALLOWABLE DEPRECIATION FOR ASSETS FROM APRIL 01, 2020 ONWARDS OF NPCL FOR FY 2020-21 (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	0.00	6.06	0.00	6.06	3.03	3.34%	0.10
3	Plant & Machinery	0.00	6.55	0.00	6.55	3.28	5.28%	0.17
4	Lines & Cables	0.00	48.07	0.00	48.07	24.03	5.28%	1.27
5	Vehicles	0.00	0.00	0.00	0.00	0.00	9.50%	0.00
6	Furniture & Fixtures	0.00	0.41	0.00	0.41	0.21	6.33%	0.01
7	Office Equipments	0.00	0.27	0.00	0.27	0.13	6.33%	0.01
8	Metering Equipment	0.00	10.48	0.00	10.48	5.24	5.28%	0.28
9	Communication Equipment	0.00	3.86	0.00	3.86	1.93	5.28%	0.10
10	Intangible Assets	0.00	4.34	0.00	4.34	2.17	15.00%	0.33
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
10	**Total Fixed Assets**	**0.00**	**80.03**	**0.00**	**80.03**	**40.02**	-	-
11	Non depreciable assets (Land & Land Rights)	0.00	0.00	0.00	0.00	0.00	-	-
12	**Depreciable assets**	**0.00**	**80.03**	**0.00**	**80.03**	**40.02**	**5.69%**	**2.27**

TABLE 4-90: NET APPROVED DEPRECIATION OF NPCL FOR FY 2020-21 (RS. CRORE)

S. No.	Particulars	Claimed	Allowable
1	Gross allowable Depreciation (Part-A)	60.04	41.72
2	Gross allowable Depreciation (Part-B)		2.27
3	Gross allowable Depreciation (Part-A+Part-B)	60.04	43.99
4	Less: Equivalent amount of depreciation on assets acquired out of the Consumer Contribution	10.09	10.09
5	**Net allowable Depreciation (for the year)**	**49.95**	**33.90**

4.15 RETURN ON EQUITY

4.15.1 The Petitioner has 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.

4.15.2 The Petitioner submitted that FY 2020-21 is the first year of the Control Period from FY 2020-21 to FY 2024-25 governed by MYT Regulations, 2019. 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 2020-21. As the Company has filed appeals against the Tariff Orders dated December 04, 2020 and August 26, 2021 before the Hon'ble APTEL, it has considered the opening balance of Debt and Equity as per its True-up Petitions / submission for the respective years for determination of return on equity for FY 2020-21.

4.15.3 Accordingly, 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 normative debt equity ratio of 70:30, the opening normative Equity for FY 2020-21 works out to Rs. 437.99 Crore.

4.15.4 The summary of Return on Equity for FY 2020-21 based on above referred Opening Equity and equity portion of Assets Capitalised during FY 2020-21 of Rs. 26.01 Crore is given in the Table below: -

TABLE 4-91: COMPUTATION OF RETURN ON EQUITY FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER (RS. CRORE)

Sl. No.	Particulars	Ref.	Approved	Claimed in True Up
1	Regulatory Equity Base at the beginning of the year	a	383.58	437.99
2	Asset Capitalized during the year	b	192.30	100.19
3	Equity portion of Assets Capitalised during the year	c	51.55	26.01
4	**Regulatory Equity Base at the end of the year**	**d=a+c**	**435.13**	**464.00**
5	Return on Opening Regulatory Equity Base @ 15%	e=ax15%	57.54	65.70
6	Return on Addition to Equity Base during the year @15%	f=cx15%/2	3.87	1.95
7	**Total Return on Equity**	**g=e+f**	**61.40**	**67.65**

4.15.5 The Petitioner requested the Commission to approve the above Return on Equity of Rs. 67.65 Crore for FY 2020-21.

Commission's Analysis:

4.15.6 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 the Tariff Order for FY 2020-21 and FY 2021-22.

4.15.7 For the purpose of arriving opening equity base for FY 2020-21, the Commission has adopted following approaches:

- Closing GFA for FY 2019-20 as approved by the Commission in the Tariff Order dated August 26, 2021 is considered as opening GFA for FY 2020-21;
- GFA addition (Capitalisation) during the year i.e., FY 2020-21 is considered as approved above.
- Asset deletion / adjustment is considered as per audited accounts of FY 2020-21;

4.15.8 Based on the above, the Commission has computed the opening equity for FY 2020-21, as shown in the Table below:

TABLE 4-92: OPENING EQUITY FOR FY 2020-21

Particulars	**Approved**
Opening GFA (net of Grants)	1273.21
Less: Consumer Contribution	186.12
Net Opening GFA	1087.09
Opening Equity (30% of Net Opening GFA)	**326.13**

4.15.9 As per first proviso of Regulation 20.2 of MYT Regulations, 2019 to determine the equity capital the same shall be reduced to the extent of 30% or lower of the retirement or replacement or de-capitalisation of the assets.

4.15.10 As per Regulation 20.2 of MYT Regulations, 2019, for FY 2020-21 the opening equity base, would be reduced to the extent of 30% of the fixed asset base computed as on March 31, 2020, or the closing equity base of FY 2019-20 approved by the Commission in the Tariff Order for FY 2021-22, whichever is lower. The opening equity considered by the Commission is shown in the Table below:

Particular	Closing Equity for FY 2019-20 approved in Tariff Order dated 26.08.2021	Computed by the Commission	Considered for FY 2020-21
	A	B	C = Lower of (A, B)
Normative Opening Equity as on 01.04.2020	315.78	326.13	315.78

4.15.11 Further, 30% of net asset capitalised (after considering deduction / de-capitalization and consumer contribution in capitalisation) has been considered as equity addition during the year. Accordingly, the Return on Equity has been computed by the Commission.

4.15.12 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

4.15.13 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 2020-21 is shown in the Tables below:

TABLE 4-93: RETURN ON EQUITY FOR FY 2020-21 AS APPROVED BY THE COMMISSION (RS. CRORE)

Sl. No.	Particulars	Ref.	Approved in TO dated 12.04.2020	Petition	Approved
1	Equity (Opening Balance)	A	383.58	437.99	315.78
2	Net additions during the year	B	51.55	26.01	17.14
3	Equity (Closing Balance)	C=A+B	435.13	464.00	332.92
4	**Average Equity**	**D=(A+C)/2**	**409.36**	**450.99**	**324.35**
5	Rate of Return on Equity	E	15.00%	15.00%	15.00%
6	**Return on Equity**	**F=D*E**	**61.41**	**67.65**	**48.65**

4.16 INCOME TAX

4.16.1 The Petitioner submitted that Regulation 26 of MYT Regulations, 2019 provides for determination of Income Tax to be considered in ARR for Control period. 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

4.16.2 The Petitioner submitted that during 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

4.16.3 The Petitioner submitted that considering the lower tax rate available under the Income Tax Act, keeping the interest of the Consumers in mind, has adopted the new tax rate and accordingly has paid Income Tax for FY 2020-21 at the rate of

25.17% as against normal tax rate of 34.94%.

4.16.4 Accordingly, the Income Tax expense for FY 2020-21 has been computed by grossing up aggregate of tax expense i.e., tax on Return on equity and tax expense for preceding years, at the current tax rate i.e., 25.17% and profit before tax is computed to determine the tax on profit for the year.

4.16.5 Considering the above, the Petitioner requested the Commission to approve the income tax liability for FY 2020-21 as shown in Table below: -

TABLE 4-94: DETAILS OF INCOME TAX AS SUBMITTED BY THE PETITIONER FOR FY 2020-21

Sl. No.	Nature of Tax	Ref.	Approved	Actual
1	Return on Equity	a	61.40	67.65
2	Income Tax Rate	b	34.94%	25.17%
3	**Total Tax Expense***	**c=a x b/(1-b)**	**32.98**	**22.75**
**Total may not tally due to rounding offs*				

Commission's Analysis

4.16.6 The Commission vide deficiency letter dated December 31, 2021 sought details along with assessment /refund orders of the Income Tax for earlier years of Rs. 2.16 Crore as provided in schedule 35 of the Audited Accounts for FY 2020-21. In reply to the Commission query the Petitioner submitted that the amount of Rs. 2.16 Crore as referred to by the Commission is not a refund of taxes but reversal of tax provisions made in earlier years in the books of accounts. NPCL submitted that every year, for the purpose of statutory audit, the Company computes the provision for Income Tax Expenses on best estimate basis in the audited accounts. Subsequently, after 6-9 months the Company files its Income Tax return for that particular year which is subject to assessment by Income Tax Authorities. After final completion of assessment by Income Tax Authorities over a period of 3-6 years (after completion of assessment & appeals, if any), necessary adjustment is passed in the financial statements of subsequent year based on the surplus /shortfall in such provision vis-a-vis final income tax liability as per the assessment order. The note on Income Tax Expenses (i.e. Note-35) in Audited Financial Statements shows the provision for Income Tax Expenses for the year as well as recognition/reversal of any short/excess tax liability for earlier years.

4.16.7 The Commission further directed the Petitioner to submit the detail break-up of Rs. 2.16 Crore submitted as income tax for earlier years. In reply, the Petitioner submitted the break-up as under:

Table 4-95: SUMMARY OF INCOME TAX PROVISION, PAYMENT AND APPROVAL AS SUBMITTED BY THE PETITIONER

Financial Year	Existing Tax Provision in Books	Estimated Tax Liability based on ITR etc.	Excess Tax Provision in Books	Tax Paid including TDS / TCS	Tax Expenses Trued-up
	a	b	c=a-b	d	e
FY 2017-18	81.96	80.56	1.40	82.21	70.83*
FY 2018-19	48.38	47.63	0.76	48.52	28.46
Total	**172.33**	**170.18**	**2.16**	**-**	**-**

** Other than tax demand of Rs. 79.74 approved for prior to FY 2017-18 (refer Table-3-59 of T.O. dated 3.09.2019)*

4.16.8 NPCL further submitted that the Commission allows the tax expenses in ARR on the basis of grossing up of Return on Equity evidenced by tax challans irrespective of the provisions made in the books. Therefore, the tax provisions made in the books of accounts has no impact on the ARR for FY 2020-21.

4.16.9 The Commission observed that the Petitioner has claimed an income tax of Rs. 22.75 Crore in the Petition, however the Petitioner has submitted the Tax challan for Rs. 20.50 Crore and the value as per the Audited Accounts is Rs. 19.87 Crore. The Commission vide deficiency letter dated December 31, 2021 sought justification for the claim along with reconciliation of the income tax as per the Audited accounts. In reply to the query of Commission the Petitioner submitted that the income tax has been claimed in accordance with Regulation 26 of the MYT Regulations, 2019 as shown in the Table below: -

Sl. No.	Particulars	Ref.	Approved	Actual
1	Return on Equity	a	61.40	67.65
2	Income Tax Rate	b	34.94%	25.17%
3	**Total Tax Expense**	**c=a x b/(1-b)**	**32.98**	**22.75**

4.16.10 The Petitioner submitted that the Tax Challan of Rs. 22.40 Crore in “Annexure-4 Tax Challan” of the Petition no. 1797 dated November 26, 2021 as summarised below:

TABLE 4-96: SUMMARY OF TAX CHALLANS FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER

Sl. No.	Particular	Amount (Rs.)	Date of Payment	Challan No.	Bank
1	Advance Tax for FY 2020-21	2,50,00,000	15-06-20	19895	HDFC Bank
2	Advance Tax for FY 2020-21	7,00,00,000	14-09-20	17229	ICICI Bank
3	Advance Tax for FY 2020-21	5,00,00,000	15-12-20	61598	HDFC Bank
4	Advance Tax for FY 2020-21	6,00,00,000	15-12-20	22621	ICICI Bank
5	Advance Tax for FY 2020-21	1,90,00,000	15-03-21	79869	HDFC Bank
	Total	**22,40,00,000**			

4.16.11 The Commission verified the computations for Income tax claimed for FY 2020-21 and observed that the Petitioner has claimed the normative income tax, based on the return on equity, which is lower than the actual income tax vis-à-vis challans and audited accounts. Accordingly, the Commission has computed the normative income tax based on the return on equity approved for FY 2020-21 which comes out to be lower than the Income Tax shown in the audited accounts, as per the Challans and as per Petitioner submission. The same is shown in the table below: -

TABLE 4-97: DETAILS OF INCOME TAX AS APPROVED BY THE COMMISSION FOR FY 2020-21

Particulars	Reference	Approved in TO dated 12.04.2020	As per Audited Accounts	As per Challans submitted	Petition	Approved
Return on Equity	a	61.40	-	-	67.65	48.65
Income Tax Rate	b	34.94%	-	-	25.17%	25.17%
Total Tax Expense	**c=a*b/(1-b)**	**32.98**	**19.87**	**22.40**	**22.75**	**16.36**

4.17 MISCELLANEOUS EXPENSES

Loss on Retirement/ Impairment of Asset:

Petitioner's submission

4.17.1 The Petitioner submitted that it has incurred actual loss on sale / retirement of Fixed Assets during FY 2020-21 amounting to Rs. 0.47 Crore.

4.17.2 The Petitioner 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

4.17.3 The Petitioner 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 below:

TABLE 3-94: 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*	*Note-3 of Audited Accounts*
2	*Less: Accumulated Depreciation on Assets retired*	*3.23*	*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***	**-**

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 Tarif 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

4.17.4 The Petitioner submitted that, once a fixed asset is retired/sold, it is written off from the books of account and therefore does not remain part of the fixed asset register. The loss on the above is also accounted in the books of accounts. However, the Commission in its Tariff Order, is neither removing such fixed assets retired/sold from the Regulatory Fixed Asset nor allowing the loss thereon. Due to this approach of the Commission, there would be gap/differences between the Fixed Asset Register of the Company and the Regulatory Asset Base and would create lot of confusion going forward.

4.17.5 The Petitioner submitted that this can be illustrated as below.

Example: -

Suppose an asset with value of Rs.100/-

It is Depreciated 90%; therefore, the Written Down Value would be Rs.10/-

The above fixed asset is retired/sold say at scrap value of Rs.6/- hence, the residual WDV of Rs. 4/- will be accounted as loss on sale of such fixed asset.

4.17.6 Under the above scenario, the Commission till FY 2017-18 had been allowing loss of Rs. 4/- in the ARR and also removing such fixed asset retired / sold from the Regulatory Fixed Asset Base. Further, the Commission followed same methodology while approving ARR for FY 2018-19 and FY 2019-20. However, the Commission contrary to the above changed its methodology vide its Tariff Order dated 04.12.2020 while truing up ARR for FY 2018-19 and neither allowed the loss nor removed the Fixed Asset retired/sold.

4.17.7 The Petitioner submitted that the retirement/sale of non-reparable/ damaged/ inefficient fixed asset is necessary for safety as well as efficient power distribution operations. Thus, the Commission is requested to allow the loss on Sale of Fixed Assets under Miscellaneous Expenses as claimed by the Company.

Commission's Analysis

4.17.8 The Commission observed that the NPCL has claimed Rs. 0.47 Crore towards loss on sale of fixed assets under Miscellaneous expenses. The Commission vide deficiency letter dated December 31,2021 sought asset-wise working of the same. In this regard the Petitioner submitted the reconciliation as under:

Table 4-98: RECONCILIATION OF LOSS ON SALE OF ASSETS AS SUBMITTED BY THE PETITIONER

Sl. No.	Description	Amount (Rs. Crore)	Remark
1	Gross value of Assets disposed/retired	3.06	Note-3 of Audited Accounts
2	Less: Accumulated Depreciation on Assets retired	2.39	Note-3 of Audited Accounts
	WDV of Assets Retired	**0.67**	**-**
2	Less: Sale Proceeds	0.20	-
3	**Loss on Sale of Assets**	**0.47**	Note-34 of Audited Accounts
Total may not tally due to rounding offs			

4.17.9 The Petitioner also provided the details for assets retired. The Commission, took a considered view in True-up of FY 2019-20 and is taking the same view in FY 2020-21. The Regulation provides for consideration of income from sale of scrap and any other non-tariff income 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 decapitalization 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. Hence the Commission for the True-up of FY 2020-21 disallows the loss on sale of fixed asset claimed by the Petitioner

4.18 EXPENSES INCURRED DUE TO CHANGE IN LAW- GST

Petitioner Submission

4.18.1 The Petitioner submitted that as explained in earlier MYT ARR/APR petitions, the Central Government has made new Goods & Service Tax (GST) effective from 1st July, 2017 which covers almost all goods and service within its ambit. The new GST has stipulated tax rate of 18% and 28% for most of the goods and services as against Service Tax of 15% and VAT of 14.5%. Apart from above it also brought into its ambit a lot many new services through Reverse Charge Mechanism or otherwise which leads to higher indirect tax burden on service users such as the Company.

4.18.2 The Petitioner further submitted that, the Inflation Index i.e. WPI being used for determination of normative R&M Expenses and A&G Expenses do not include the impact of changes in indirect taxes, hence the Discoms are not compensated for increase in GST when R&M Expenses and A&G Expenses are determined on normative basis as per MYT Regulation, 2019. Apart from above, it is also pertinent to mention here that R & M Expenses are allowed as a percentage of GFA and since, GST has come into being only from 1.07.2017, thus, only additions post the aforesaid date can only be said to include GST in the cost which is not even 10% of the total GFA

4.18.3 Considering the above, the Petitioner got the impact analysis of the GST done from M/s Lakshmikumaran & Sridharan, Attorney which summarized and brought forth the impact of GST Act as well as rules, notifications, etc., made thereunder, on the distribution of electricity done by the Company, with emphasis on cost of various expenses incurred by the Company pre and post implementation of GST. This

Report provided an insight into the indirect taxation system of the country post GST and contained an analysis of the cost increase/decrease to Company after the implementation of GST.

4.18.4 The Petitioner submitted that based on report, the Commission in its Tariff Order dated September 03, 2019 approved average incremental rate of GST as 5.88% while approving the True-up of ARR for FY 2017-18.

4.18.5 The Petitioner submitted that with the applicability of the MYT Regulation, 2019 from FY 2020-21, Normative O&M Expenses for Base Year FY 2019-20 has been determined on the basis of CPI and WPI based escalation of O&M Expenses for Mid-Year FY 2017-18. Now, since GST became applicable only from 2nd quarter of FY 2017-18, the above referred GST impact @ 5.88% does not get covered entirely in the computation of normative O&M Expenses for FY 2020-21 on the basis of Regulation 45 of the MYT Regulations, 2019.

4.18.6 The same may be explained with following example: -

TABLE 4-99: IMPACT OF GST ON NORMATIVE O&M EXPENSES AS SUBMITTED BY THE PETITIONER

Financial Year	Assumed O&M Expense before GST	Actual GST Impact	Assumed O&M Expense after GST Impact
FY 2015-16	100.00	-	100.00
FY 2016-17	100.00	-	100.00
FY 2017-18	100.00	5.88	105.88
FY 2018-19	100.00	5.88	105.88
FY 2019-20	100.00	5.88	105.88
Average	**100.00**	**3.53**	**103.53**
FY 2020-21	100.00	5.88	105.88
Loss of GST Impact	**-**	**(2.35)**	**(2.35)**

4.18.7 The Petitioner submitted that from the above table, it may be seen that normative O&M Expenses computed in accordance with the provisions of the Regulation 45 of MYT Regulations, 2019 for FY 2020-21 would be only Rs. 103.53 as against actual O & M expenditure of Rs. 105.88 (assuming no inflation for simplicity). Thus, out of the total Impact of GST @ 5.88% being verified and approved by the Commission vide its Tariff Order dated September 03, 2019, only 3.53% is allowed in the normative O&M expenses.

4.18.8 The Petitioner submitted that since remaining GST Impact of 2.35% is not covered in Normative O&M Expenses for FY 2020-21 determined as per Regulation-45 of the MYT Regulations, 2019, the Petitioner has claimed the same as Change in Law under Other Items (Miscellaneous Debits) of ARR for FY 2020-21 as summarised in Table below: -

TABLE 4-100: CHANGE IN LAW (IMPACT OF GST) AS SUBMITTED BY THE PETITIONER (RS. CRORE)

Sl. No.	GST Item	Ref	Actual
1	Repair & Maintenance Expenses	A	46.52
2	Administrative and General Expenses	B	13.37
3	Subtotal	C=A+B	59.89
4	Rate for change-in-law impact of GST	D	2.35%
5	Change-in-law impact of GST	E=C x D	1.41

4.18.9 The Petitioner submitted that with regard to the assertion that the indexes include impact of the Taxes, the Press Release dated May 12,2017 issued by Ministry of Commerce & Industry with respect to inflation indices of WPI (being used for the purpose of R&M Expenses and A&G Expenses) states that it does not include the impact of taxes.

4.18.10 Since, the “Change in Law” is an “Uncontrollable Factor” as defined under Regulation-8 of MYT Regulation, 2019, the Commission is requested to kindly approved the claimed amount of Rs. 1.41 Crore under the head of Other Items for ARR of FY 2020-21.

4.18.11 The Petitioner submitted that the CBEC vide Circular No. 34/8/2018-GST dated March 01, 2018 has clarified that the services as stated below when provided by DISCOMS to consumer are taxable.

I. Application fee for releasing connection of electricity
II. Rental Charges against metering equipment
III. Charges for duplicate bill
IV. Testing fee for meter/transformer, capacitors etc.
V. Labour charges from customer for shifting of service lines

4.18.12 Consequently, Directorate General of GST Intelligence (DGGSTI), New Delhi issued a summon u/s 70 of CGST Act on 29th May’18, requesting the Petitioner to produce information on the amounts collected by the Petitioner from 1st July, 2017 to 30th April, 2018 towards abovementioned five services or any other charges collected from the customers over and above the electricity charges for the period.

4.18.13 The Petitioner filled the detailed reply in response to summon and also filed a writ petition before Hon'ble Allahabad High Court on 24th July'18 and challenged above Circular issued by Department of Revenue and summon issued by DGGSTI. Since, the matter before Hon'ble Allahabad High Court is still pending, the Company in the meantime has filed an intervention petition on 13th November, 2019 in respect of the same matter already pending before the Hon'ble Supreme Court in the case of Torrent Power Ltd. wherein the Department has filed an appeal against the judgement of Hon'ble Gujrat High Court being given in favour of Torrent Power Ltd.

4.18.14 Further taking abundant precaution and without prejudice to the Company's rights and contentions with respect to above writ and intervention petitions, the Petitioner has started to levy GST on above services from October, 2018 onwards.

4.18.15 Therefore, depending on the outcome of the above-mentioned writ and intervention petitions, the Petitioner in future may become liable to pay GST on above services in respect of the duration when GST was not levied on such service.

4.18.16 However, the Petitioner submitted that, pending final adjudication of the matter, the amount payable cannot be ascertained at this stage, therefore, the Company has not claimed the same in this ARR Petition and it shall claim so on actual basis at an appropriate time.

Commission's Analysis:

4.18.17 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 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.:

$$\mathbf{EMP_n = EMP_{n-1} \times (1 + CPI\ inflation)}$$

Where:

EMP_n: Employee expense for the nth 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:

$$R\&M_n = R\&M_{n-1} (1 + \text{WPI inflation})$$

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:

$$A\&G_n = A\&G_{n-1} (1 + \text{WPI inflation})$$

Where:

$A\&G_n$: A&G expense for the nth 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

4.18.18 As can be seen above that the R&M Expenses as per the MYT Regulations, 2019 are derived based on the Trued Up value of R&M Expenses from FY 2015-16 to FY 2019-20. In these years trued-up values of R&M Expenses are based on MYT Regulations, 2014 Regulations wherein the norm was linked to the GFA and hence included the impact of sales Tax or GST i.e., applicable taxes. Hence, in R&M expenses to be allowed under the MYT Regulations, 2019 the impact of GST is already included and therefore additional claim of GST on R&M cannot be allowed.

4.18.19 Further the Commission has observed that the issue of GST was also appraised in other State Commission's as well. In this regard MERC in AEML-D Petition No. 325 of 2019 dated March 30, 2020 Order i.e., True Up for FY 2017-18 and FY 2018-19 provided that:

Quote

> *Impact of GST: The Commission is of the view that the change in Tax regime from Service Tax to GST is merely change in name. The taxes levied under Service Tax are of same nature of the taxes levied under GST and therefore, there is no New tax that is being levied on account of GST. Further, O&M expenses have been linked to escalation index arrived based on WPI and CPI published by the Govt. of India. Both WPI and CPI include the impact of all taxes and duties applicable at that point of time. Therefore, as escalation factor arrived as above already includes impact of all taxes, no separate impact on O&M expenses on account of GST needs to be allowed. Therefore, the Commission does not consider the contentions of AEML-D to separately allow impact of GST as an uncontrollable expenditure under 'Change in Law'.*

Unquote

4.18.20 The Commission in light of the approach adopted during true-up of FY 2019-20, impact of GST claimed by the Petitioner has not been allowed for True-up FY 2020-

21.

Sl. No.	GST Item	Ref	True-up Petition	Approved
1	Repair & Maintenance Expenses	A	46.52	_
2	Administrative and General Expenses	B	13.37	_
3	Subtotal	C=A+B	59.89	_
4	Rate for change-in-law impact of GST	D	2.35%	_
5	Change-in-law impact of GST	E=C x D	1.41	_

4.19 EFFICIENCY GAIN ON LOAN SWAPING

Petitioner Submission

4.19.1 The Petitioner submitted that in its continuous endeavour to minimize the cost of borrowing the Company in preceding years renegotiated various loan facilities by swapping of these loan facilities with new facilities bearing lower cost. Such, swapping of loans resulted in accrual of saving in interest cost to be shared with its consumers.

4.19.2 The Petitioner has estimated the accrual of such efficiency gain while preparing MYT ARR Petition for Control Period and has submitted the details for the same and claimed part of the above efficiency gains in its MYT ARR petition, which has since been approved by the Commission in its tariff order dated November 30, 2017, 22nd January, 2019 and 4th December, 2020.

4.19.3 Accordingly, the Petitioner has considered the efficiency gains accrued on swapping of loans for FY 2020-21 as already approved by the Commission and shown in Table below: -

TABLE 3 94: EFFICIENCY GAIN ON TERM LOAN SWAPPING FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER (RS. CRORE)

Sl. No.	Bank	Loan Amount	Actual
1	ICICI Bank (FY 17)	100	0.11
2	**50% Efficiency Gain claimed**		**0.05**
Total may not tally due to rounding offs			

4.19.4 The Petitioner has requested the Commission to allow the above efficiency gains in true-up of ARR for FY 2020-21.

Commission's Analysis

4.19.5 The Commission vide deficiency letter dated December 31,2021 with regards to efficiency gain claimed on loan swapping sought copy of the approvals in case the same is approved and also directed the Petitioner to submit the detailed computation of saving claimed through loan swapping in Excel with all linkages and related supporting documents. In reply to the Commission query the Petitioner submitted the details of efficiency gains on swapping of loans as claimed below:

TABLE 4-101: DETAILS OF EFFICIENCY GAINS ON LOAN SWAPPING SUBMITTED BY THE PETITIONER

Efficiency Gain on Term Loan Swapping (FY 2017-18)				
Sl. No	***Bank***	***Loan Amount***	***Approved***	***Actual***
1	*ICICI Bank (FY 14)*	*125*	*0.16*	*0.16*
2	*ICICI Bank (FY 14)*	*40*	*0.09*	*0.09*
3	*Central Bank of India*	*75*	*0.21*	*0.21*
4	*ICICI Bank (FY 17)*	*125*	*0.04*	*0.04*
5	*ICICI Bank (FY 17)*	*40*	*0.05*	*0.05*
6	*ICICI Bank (FY 17)*	*100*	*0.40*	*0.40*
7	***Total***		***0.95***	***0.95***
8	***50% Efficiency Gain claimed/approved***		***0.47***	***0.47***
Efficiency Gain on Term Loan Swapping (FY 2018-19)				
				(Rs. Cr.)
Sl. No.	***Bank***	***Loan Amount***	***Approved***	***Actual***
1	*ICICI Bank (FY 14)*	*125*	*0.03*	*0.03*
2	*ICICI Bank (FY 14)*	*40*	*0.05*	*0.05*
3	*Central Bank of India*	*75*	*0.06*	*0.06*
4	*ICICI Bank (FY 17)*	*125*	*0.01*	*0.01*
5	*ICICI Bank (FY 17)*	*40*	*0.03*	*0.03*
6	*ICICI Bank (FY 17)*	*100*	*0.30*	*0.30*
7	***Total***		***0.48***	***0.48***
8	***50% Efficiency Gain claimed/approved***		***0.24***	***0.24***
Efficiency Gain on Term Loan Swapping (FY 2019-20)				
				(Rs. Cr.)
Sl. No.	***Bank***	***Loan Amount***	***Approved***	***Actual***
1	*ICICI Bank (FY 14)*	*125*	*0.01*	*0.01*

2	*ICICI Bank (FY 17)*	40	0.01	0.01
3	*ICICI Bank (FY 17)*	100	0.21	0.21
4	***Total***		***0.23***	***0.23***
5	***50% Efficiency Gain claimed/approved***		***0.12***	***0.12***
Efficiency Gain on Term Loan Swapping (FY 2020-21)				
				(Rs. Cr.)
Sl. No.	***Bank***	***Loan Amount***		***Actual***
1	*ICICI Bank (FY 17)*	100		0.11
4	***Total***			***0.11***
5	***50% Efficiency Gain claimed/approved***			***0.05***

4.19.6 The Petitioner further submitted that the Commission, in its Multi Year Tariff Order dated November 30, 2017, has allowed trajectory of Efficiency Gain for loan swapping wherein it stated as follows.

Quote

> *5.6.1 The petitioner submitted that in order to minimize the cost of borrowing, during FY 2013-14 the Company renegotiated its existing term loan facilities with ICICI Bank, IDBI Bank and Bank of Maharashtra for swapping of these loan facilities with new facilities bearing lower cost. Such, swapping of loans resulted in accrual of saving in interest cost of Rs. 4.31 Cr. to be shared with its consumers in accordance with regulation 4.8 and 4.11 of UPERC Distribution Tariff Regulations, 2006 and also Regulation 27 (h) of Distribution MYT Regulations 2014.*
>
> *5.6.2 The petitioner further submitted that during FY 2015-16 the Company prepaid its existing term loan facilities with Central Bank of India and replaced the same with term loans facilities of Rs. 20.00 Cr from State Bank of Mysore and Rs. 28.81 Cr from IDBI Bank both bearing lower cost and resulting in accrual of saving in interest cost of Rs. 1.14 Cr. to be shared with its consumers. The petitioner has worked out the savings in the interest cost amounting to Rs. 0.47 Crore, 0.24 Crore and 0.12 Crore for FY 2017-18, FY 2018-19 and FY 2019-20 respectively.*

5.6.3 In accordance to Regulation 27(h) of the Distribution MYT Regulations, 2014, the Commission has provisionally considered the efficiency gain of Rs. 0.47 Crore, 0.24 Crore and 0.12 Crore for FY 2017-18, FY 2018-19 and FY 2019-20 respectively, due to loan swapping as claimed by the Petitioner which shall be subject to True-up as per the Audited Accounts of the Petitioner."

4.19.7 The Petitioner submitted that the Commission in its Order dated January 22, 2019 again followed the same practice and observed as follows:
Quote

5.12.1 The Petitioner has considered the efficiency gain of Rs. 0.24 Crore accrued on swapping of loans for FY 2018-19 as already approved by the Commission in its Tariff Order dated November 30, 2017.

5.12.2 In accordance with the Clause 27(h) of the Distribution MYT Regulations, 2014, the Commission has provisionally considered the efficiency gain of Rs 0.24 Crore due to loan swapping as claimed by the Petitioner which shall be subject to True-up as per the Audited Accounts of the Petitioner."

Further, the Commission in its Order dated 22.01.2019 and Order dated 03.09.2019 also allowed the same while Truing up accounts of FY 2016-17 and FY 2017-18 as follows:

FY 2016-17

"3.16.3It is clear that the consumers as well as Licensee should be benefited by the swapping of the loans. The relevant provision of Clause 4.8.1(f) of the Distribution Tariff Regulations, 2006 in this regard is reproduced below:

Quote

(f) The benefit on account of loan swapping / restructuring of debts shall be shared between the distribution licensee and the consumers/beneficiaries in the proportion specified in regulation 4.11.

Provided that interest and finance charges of renegotiated loans agreements shall not be considered, if they result in higher charges,

Provided further that the Commission will allow the cost of debt restructuring / swapping of loans while determining the Aggregate Revenue Requirement of the licensee.

Provided further that interest and finance charges on works in progress shall be excluded and shall be considered as part of the capital cost.

Provided further in case of any moratorium period is availed of by the Distribution licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as loan repayment during those years and the interest on loan capital shall be calculated accordingly

Unquote

The relevant provision of Clause 4.11 of the Distribution Tariff Regulations, 2006 is reproduced below:

Quote

4.11 Profit Sharing

1. The licensee will be allowed an approved return for the ensuing financial year.

2. However, if the licensee makes more profit than the approved return on account of improved performance by way of reduction of Distribution Losses, better collection efficiency etc., the Commission may treat the profit beyond the approved return in the following manner:

(i) Licensee shall be entitled to retain 50% of the additional profit earned on account of operational efficiencies

(ii) 25% shall be credited to the licensee's contingency reserve.

(iii) The remaining 25% shall be passed on to the consumers by way of reduction in ARR.

Unquote

3.16.4 Since the reduction in interest is more than the processing cost of swapping of the loans, the Commission, in line with the provisions of the Distribution Tariff Regulation, 2006 stated above, has approved efficiency gain of Rs 0.35 Crore for FY 2016-17 on account of swapping of term loan undertaken during FY 2016-17 as claimed by the Petitioner."

<u>FY 2017-18</u>

3.15.3 It is clear that the consumers as well as Licensee are benefited by resetting or swapping of term loans, if such loans result in lowering the net interest rate. In this regard, the relevant provisions of the UPERC (Multi Year Distribution Tariff) Regulations, 2014 in this regard are reproduced below:

Quote

27 Treatment of Interest on loan

……..

The Distribution Licensee shall make every effort to refinance the loan as long as it results in net benefit to the consumers.

Provided that the cost associated with such refinancing shall be eligible to be passed through in tariffs and the benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 50:50 between the Distribution Licensee and the consumers.

Provided further that the Distribution Licensee shall submit the calculation of such benefit to the Commission for its approval.

Unquote

3.15.4 The Commission enquired from the Petitioner regarding the break- up of Efficiency gains claimed for FY 2017-18 and directed it to submit the same. The Petitioner vide mail submitted the break- up of Efficiency gains claimed for FY 2017-18 as shown in the table below:

Table 3-45: Summary of Efficiency Gain for FY 2017-18 on Refinancing of loan

S.	***Particulars***	***Interest Reset/ Loan Swap***	***Old Interest***	***Revised Interest***	***Annual Accrual of Efficiency Gains (Rs Cr)***									
					FY 14	***FY 15***	***FY 16***	***FY 17***	***FY 18***	***FY 19***	***FY 20***	***FY 21***	***FY 22***	***Total***
1	*ICICI Bank Limited-125 Cr*	*Interest Reset*	*13.90%*	*11.75%*	*0.30*	*0.60*	*0.45*	*0.31*	*0.16*	*0.03*	*-*	*-*	*-*	*1.85*
2	*ICICI Bank Limited-40 CR*	*Interest Reset*	*12.75%*	*11.75%*	*0.10*	*0.21*	*0.17*	*0.13*	*0.09*	*0.05*	*0.01*	*-*	*-*	*0.77*
3	*IDBI Bank Limited-75 Cr*	*Interest Reset*	*13.25%*	*11.85%*	*0.42*	*0.44*	*0.29*	*0.12*	*-*	*-*	*-*	*-*	*-*	*1.27*
4	*Bank of Maharashtra-55 Cr*	*Interest Reset*	*13.50%*	*12.25%*	*0.12*	*0.17*	*0.11*	*0.02*	*-*	*-*	*-*	*-*	*-*	*0.42*
5	*Central Bank of Inida-80 Cr*	*Loan Swap*	*12.00%*	*10.85%*	*-*	*-*	*0.51*	*0.36*	*0.21*	*0.06*	*-*	*-*	*-*	*1.14*
6	*ICICI Bank Limited-125 Cr*	*Interest Reset*	*11.10%*	*10.60%*	*-*	*-*	*-*	*0.02*	*0.04*	*0.01*				*0.06*
7	*ICICI Bank Limited-40 CR*	*Interest Reset*	*11.10%*	*10.60%*	*-*	*-*	*-*	*0.02*	*0.05*	*0.03*	*0.01*			*0.10*
8	*ICICI Bank Limited-100 CR*	*Interest Reset*	*11.20%*	*10.60%*	*-*	*-*	*-*	*0.15*	*0.40*	*0.30*	*0.21*	*0.11*	*0.01*	*1.18*
9	*Yes Bank Ltd- 30 Cr*	*Loan Swap*	*12.50%*	*10.00%*	*0.14*	*0.03*								
	Total				***1.08***	***1.46***	***1.54***	***1.12***	***0.95***	***0.48***	***0.23***	***0.11***	***0.01***	***6.79***

3.15.5 It can be observed from the above Table that the Licensee has shown Rs 0.95 Cr of efficiency gains due to interest resetting and loan swapping. The Petitioner has shown two cases of Loan swapping, i.e., Rs 80 Cr from Central Bank of India and Rs 30 Cr from Yes Bank Ltd., as shown in the table above was done by the Petitioner in FY 2014-15 and FY 2012-13, respectively.

3.15.6 Further the Commission enquired to the Petitioner that whether the reduction in interest rate/ resetting of interest rate was because of any change in the regulatory regime. The Commission also asked the Petitioner that why should the efficiency gains be allowed in FY 2017-18 when the interest gains were allowed in FYs prior to FY 2017-18. The Petitioner vide E-mail submitted his replies as shown below:

Quote

The change in the rates of interest with respect to loans from ICICI Bank is clearly because of effort done by the Company for renegotiating the prevailing interest rates on loans from ICICI Bank Limited and it was not because of any change in the regulatory regime. We are enclosing a mail conversation held with ICICI Bank Limited during Sep'2016 which clearly shows the acceptance by ICICI Bank Limited for reducing the rates on all Term Loans which was later implemented through revised sanction letter.

With respect to claim of the Company that the efficiency gains do arise in FY 2017-18 as the company has negotiated loan in FY 2016-17, we humbly submits that a term loan spreads over a period of 6 -7 years and any change in ROI in one year will have consequential changes in subsequent period as well. We have already submitted a table along with detailed working for each loan clearly depicting the benefit arising over the remaining period of the respective loan Accordingly, the Company has claimed the benefit arising in FY 2017-18, FY 2018-19 and FY 2019-20 on the basis of loans assumed to be outstanding in that particular year and benefit arising due to resetting of rates.

Also, you will agree that had the Company not negotiated the loan in FY 2016-17, the interest rate utilised in computation of weighted average ROI as per MYT Distribution Tariff Regulations 2014 would be higher and thus, the interest expense computed accordingly would have been higher than claimed in current ARR. Thus, the benefit arising due to such reduced ROI during the control period only has been claimed on 50% basis strictly in accordance with the provisions of the aforesaid regulations.

Unquote

3.15.7 From the above reply of the Petitioner, the Commission holds that the Petitioner is eligible for efficiency gains an account of refinancing of loans. Therefore, the Commission allows efficiency gains of Rs 0.47 Cr, as claimed by the Petitioner for FY 2017-18."

Based on above observation, the Hon'ble Commission at the time of truing-up for FY 2017-18 had allowed efficiency gains on normative basis irrespective of actual loans o/s as at 31st Mar'18.

Further, Regulation 27 (h) of the MYT Regulations, 2014 provides as below:

"27 Treatment of Interest on loan

h) The Distribution Licensee shall make every effort to refinance the loan as long as it results in net benefit to the consumers.

Provided that the cost associated with such refinancing shall be eligible to be passed through in tariffs and ***the benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 50:50 between the Distribution Licensee and the consumers.***

Provided further that the Distribution Licensee shall submit the calculation of such benefit to the Commission for its approval.

Unquote

4.19.8 The Petitioner submitted that the Commission has been allowing the efficiency gains on Loans in accordance with the provisions of the MYT Regulations, 2014 which duly recognize and provides for sharing of Efficiency Gains and its own earlier Orders. Therefore, the Petitioner requested the Commission to allow the efficiency gains as claimed for which the trajectory has already been approved by the Commission in its preceding tariff orders and as per the provisions of the MYT Regulations, 2014.

4.19.9 The Commission observed that for True-Up of FY 2020-21, there is no actual long-term as per the audited balance sheet and the Petitioner has claimed interest on normative loan (actual loan in FY 2020-21 is Zero). Hence the Commission disallows the efficiency gain on loan swapping which will be an additional burden on the Consumers.

Total Other Miscellaneous Items

4.19.10 Based on the above miscellaneous expenses approved by the Commission for FY 2020-21 is as shown in the Table below:

TABLE 3-95: DETAILS OF MISCELLANEOUS ITEMS FOR FY 2020-21 AS APPROVED BY THE COMMISSION (RS. CRORE)

Sl. No.	Description	Tariff Order for FY 2020-21 dated 04.12.2020	True-up Petition	Approved
1	Loss on Sale of Assets	-	0.47	_
2	Impact of GST	-	1.41	_
3	Efficiency Gain on Loan swapping	-	0.05	_
4	**Total**	**-**	**1.93**	_

4.20 PROVISION FOR DOUBTFUL DEBTS

Petitioner's submission

4.20.1 The Petitioner submitted that expenses for Provision for Bad and doubtful debts actually incurred and provided for by the petitioner is provided in Table below:

TABLE 4-102: PROVISION FOR BAD & DOUBTFUL DEBTS AS SUBMITTED BY PETITIONER FOR FY 2020-21 (RS. CRORE.)

Sl. No.	Description	Approved	Claimed in True Up
1	Opening Receivable	229.72	88.40
2	Revenue billed for the year	1639.07	1,761.06
3	Collection for the year	1,633.16	1,753.66
4	Closing Receivable	235.63	95.80
5	**Provision for Bad & Doubtful debts**	**13.82**	**17.78**
6	Provision as % of Revenue billed	0.84%	1.01%

4.20.2 The Petitioner submitted that the bad debts have been determined in accordance with the policy of the Petitioner for provision and write-off of receivables.

4.20.3 The Petitioner further submitted that the dues from consumers which are long outstanding but could not be disconnected because of political or some other reasons are being provided for in the audited books of accounts. 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 culminates into very high legal costs and colossal waste of precious time of the officials of the Petitioner which otherwise could be used for productive purposes. Thus, after reviewing each and every debtor on case-to-case basis, these debtors are also provided for based on their chances of recovery, cost-benefit etc.

4.20.4 The Petitioner submitted that 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 (L/C) or Bank Guarantee (B/G), 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 Petitioner 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.

4.20.5 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.

4.20.6 The Petitioner stated that the amount of Rs. 17.78 Crore provided as bad debts in FY 2020-21 is well within the norms of 2% specified in Regulation 46.1 of the MYT Regulations, 2019, thus, it is humbly submitted to kindly approve the bad debts of Rs. 17.78 Cr in full which is only 1.01% of the revenue for True-up of ARR for FY 2020-21.

4.20.7 The Petitioner submitted that the Commission, while approving the provision for Doubtful Debt for FY 2020-21 vide its Tariff Order dated December 04, 2020 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:

> *"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.***
>
> *………."*

4.20.8 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 Company to the consumers along with the other charges for electricity. Therefore, the same is integral part of the revenue and the receivables of the Company. Accordingly, the Commission in the past has been allowing the same as a part of the revenue receivables.

4.20.9 In view of the above, the amount of bad debts includes Rs. 0.85 Crore towards electricity duty.

Commission's Analysis

4.20.10 The 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

4.20.11 The Commission vide deficiency letter dated December 31, 2021 sought the Board Resolution for approval of writing off the bad Debts along with the Consumer-wise list of the same. In reply to the Commission query NPCL submitted the Commission vide its order dated November 30, 2017 (through Directives enlisted under Table 9-4) directed the Company 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 in Table 9-1 at Sl. No. 3 as under: -

> *"Policy for provision and write-off of debtors for FY 2016-17 is submitted along with the sample cases."*

4.20.12 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.

4.20.13 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.

4.20.14 The Commission observed that the NPCL has calculated the electricity duty at 4.76% of the Bad debts. The Commission vide deficiency letter dated December 31,2021 sought detailed justification from NPCL for arriving at the value of electricity duty of Rs. 0.85 Crore for FY 2020-21. In reply to the Commission query NPCL submitted as under:

TABLE 4-103: ELECTRICITY DUTY ON BAD DEBTS SUBMITTED BY THE PETITIONER

Sl. No.	Description	Ref	Amount in Rs. Cr.	Remark
1	Net Revenue for FY 2020-21	A	1677.18	Note-34 of Audited Accounts
2	Electricity Duty for FY 2020-21	B	83.88	
3	**Gross Revenue for FY 2020-21**	**C=A+B**	**1761.06**	
4	**Electricity Duty Component in Gross Revenue**	**D=B/C**	**4.76%**	
5	Bad Debts written off	E	6.80	Note-34 of Audited Accounts
6	Provision for Doubtful Debts	F	10.98	
7	**Total Bad Debts and Provision for Doubtful Debts**	**G=E+F**	**17.78**	
8	Electricity Duty component in Provision for Doubtful Debts @ 4.76%	H=G x 4.76%	0.85	
Total may not tally due to rounding offs				

4.20.15 The Commission noticed that the Petitioner has claimed Rs. 17.78 Crore as provision for bad debt in line with the Note 34 of the audited account for the FY 2020-21.

4.20.16 Bad debts subject to actual write off in the audited books shall be allowed up to 2% of the revenue for the year under consideration. The Petitioner has claimed provision for bad debts for FY 2020-21 at 1.01% of revenue billed during the year as per the transparent policy duly approved by the Commission.

4.20.17 The Commission has observed that the total amount for provision for bad debts shown in the books of accounts is Rs 17.78 Crore which is inclusive of electricity duty. The Petitioner has included the amount of bad debts with respect to electricity duty, i.e., Rs. 0.85 Crore while claiming the abovementioned amount of Rs 17.78 Crore towards provision for bad debts.

4.20.18 The Petitioner has made for provision for writing off bad debts on actual basis after taking its management's approval. Therefore, the Commission trued-up the bad debts at 1.01% of revenue billed for FY 2020-21, which is less than the 2% as provided in the Regulations. The details of bad debts trued-up by the Commission for 2020-21 are provided in the table below:

TABLE 4-104: PROVISION FOR BAD DEBTS APPROVED BY COMMISSION FOR FY 2020-21 (RS. CRORE)

Particulars	Approved in TO dated 04.12.2020	Petition	Approved
Revenue billed during the year	1639.07	1761.06	1677.18
Provision as % of revenue billed as per Regulations	2.00%		
Provision as % revenue billed claimed	0.84%	1.01%	1.01%
Provision of bad and doubtful debt	**13.82**	**17.78**	**17.78**
Less: Electricity duty	**-**	**-**	**0.85**
Net-Provision of Bad & doubtful debt	**-**	**-**	**16.93**

4.21 NON-TARIFF INCOME

4.21.1 The Petitioner submitted that Regulation 47 of MYT Regulations, 2019 provides for consideration Non-tariff Income in ARR as follows: -

"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.”

4.21.2 Accordingly, Non-Tariff Income comprising Income from delayed payment surcharge and other miscellaneous receipts incidental to business of electricity supply during FY 2020-21 is summarized in Table below:

TABLE 4-105: NON-TARIFF INCOME AS SUBMITTED BY THE PETITIONER FOR FY 2020-21 (RS. CRORE.)

Sl. No.	Particulars	Approved	Claimed in True Up
1	Income from Contingency Reserves Investments	9.34	0.13
2	Miscellaneous Receipts from Consumers		1.22
3	Miscellaneous Receipts from other sources		0.85
4	Delayed Payment Surcharge		5.25
5	**Total Non-Tariff Income**	9.34	7.45

4.21.3 The Petitioner submitted that the other income as shown above excludes income from treasury operations amounting to Rs. 14.98 Crore as this Income is generated upon the funds accrued through internal resources over earlier years. Since, this income has been generated out of the utilisation of internal funds of the Company, 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. 0.57 Crore.

4.21.4 The Petitioner submitted that Regulation 25.2 of the MYT Regulations, 2019 provides as under:

> ***"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."*

4.21.5 The Petitioner submitted that the normative working capital computed as per above Regulation compensates the distribution company only for the 45 days of credit period which is given to the consumers. However, Delayed Payment

Surcharge accrues when a consumer defaults in payment of bills as per due date which is generally 15 days from the date of billing which happens to be 2-7 days after the meter reading date which is generally taken after 30 /31 days interval. Hence, the total number of days after which the delayed payment surcharge accrues beyond the number of days for which a distribution licensee is compensated by interest on working capital as per above i.e., 45 days.

4.21.6 Thus, it can be concluded that DPS belongs to the period beyond normative period of 45 days for which interest on working capital is not provided in the Distribution Tariff Regulations., while, the late payment surcharge is charged only if the delay is more than normative credit period. Accordingly, for the period of delay beyond the normative period, the Distribution company has to be compensated with the cost of such additional financing.

4.21.7 The Petitioner submitted that debtors older than 60 days but not more than 90 days are funded only to the extent of 75% of such debtors by the Banks / FIIs and remaining is contributed by the Company through equity. Further, debtors older than 90 days are not funded by the Banks at all and the same is being financed by the Petitioner through equity. Thus, to adequately compensate the Company, the Commission has been, hitherto, approving the financing cost of such deferred receivables at the rate equivalent to weighted average SBI-PLR from last many Tariff Orders.

4.21.8 The Petitioner submitted that, in this regard, reference may be also be made to Judgment dated July 30,2010, passed by the Hon'ble Appellate Tribunal for Electricity (APTEL) in Appeal No.153 of 2009, wherein it was observed as under:

> *"23. In the light of the aspects pointed out on behalf of the Appellant, the reply made on behalf of the State Commission may not be correct for the reasons given below:*
>
> *(i) The normative working capital compensates the distribution company in delay for the 2 months credit period which is given to the consumers.*
>
> *(ii) Admittedly, the late payment surcharge is charged only if the delay is more than normative credit period.*

> *(iii) Thus, for the period of delay beyond the normative period, the Distribution company has to be compensated with the cost of such additional financing.*
>
> *25……….. While fixing the interest rate, the State Commission should have considered the prevalent SBI prime lending rate. Even in the said judgment, the Tribunal has laid down the principle that the rate of carrying cost must be derived from prevalent prime lending rates."*
>
> *……. "*

4.21.9 The Petitioner submitted that based on the above Judgement, the Commission had been allowing the Cost of Borrowing for Delayed Payment Surcharge starting with Tariff Order dated October 19, 2012 wherein it observed as follows: -

> *"6.15.6 It is quite apparent that delayed payment surcharge belongs to the period beyond normative period for which the licensee is not compensated at the time of computation of interest on working capital. Thus, to appropriately compensate for the cost incurred for financing that deferred payment beyond the normative period, the Commission in this order approves to reduce the amount of non-tariff income by the financing costs of DPS.*
>
> *6.15.7 The financing cost of delayed payment surcharge is computed by the Commission based on the actual DPS for the year. The DPS is grossed up conservatively based on the highest applicable surcharge rate which is 1.5% per month. Further, the financing cost is arrived at on the grossed-up amount and the weighted average SBI PLR rate applicable."*

4.21.10 The Petitioner submitted that the DPS accrues on receivables outstanding beyond the normative period of 45 days being considered for approving the normative working capital requirement. Accordingly, receivables on which DPS accrues are funded by the licensee which has also been acknowledged by the Commission in its earlier orders.

4.21.11 The Petitioner further submitted that, the licensee needs to fund such overdue receivables either through borrowings or from its own sources and in either of cases, it is entitled to be compensated with the cost of financing the same. Therefore, existence / non-existence of loans or incurrence of funding cost against DPS is not relevant for computation of compensatory normative allowance of cost of funding DPS.

4.21.12 The fact that the Petitioner need allowance for cost of financing of delayed payment is well acknowledged in Commissions earlier tariff orders as well as the same is evident from the proviso to Regulation-45.3 of the MYT Regulations, 2019 as reproduced below: -

> *"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."*

4.21.13 The Petitioner has mentioned that, the Company in its various submission has highlighted that the banks / non-banking financial institutions (NBFCs) provides funding only up-to 75% of 60 days of debtors and the licensee has to fund such delayed recovery of dues / receivables through Promoters' Equity. Thus, the Company effectively bears the cost of funding of Delayed Payments at the rate of 10.93% (i.e. 75% of 9.57% being Interest on Working Capital and 25% of 15% being Return on Equity). However, as the Commission treats such excess equity as debt only (for the purpose of Capex / Working Capital/deferred receivables etc.) and has been earlier approving the cost of financing DPS on normative basis being computed by grossing up actual DPS for the year on highest applicable surcharge rate i.e. 2% per month and applying the normative rate of interest considered for working capital loan i.e. weighted average SBI MCLR on principle amount so computed. Therefore, without prejudice to its rights, the Company has considered the RoI of 9.57% being the weighted average SBI MCLR for determination of cost of borrowing of Delayed Payment Surcharge.

4.21.14 Accordingly, based on the above principles, the cost of borrowing in respect of Delayed Payment Surcharge for Control Period has been computed as shown in Table below: -

TABLE 4-106: COST OF BORROWING FOR DPS FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER (RS. CRORE.)

Particulars	Reference	Approved	Actual
Delay payment Surcharge Received	a		5.25
Working Capital Utilisation @ 24% p.a.	b= (a /24%)		21.87
Applicable Interest Rate for Working Capital Finance	c		9.57%
Cost of Borrowing for DPS	**d=b x c**	**1.91**	**2.09**

4.21.15 The Petitioner submitted that accordingly, the non-tariff income has been considered after reducing the cost of borrowing of deferred payment beyond normative period from the total non- tariff income for the purpose of APR as shown in Table below: -

TABLE 4-107: NET NON-TARIFF INCOME AS SUBMITTED BY PETITIONER FOR FY 2020-21 (RS. CRORE.)

Sl. No.	Particulars	Ref.	Approved	Claimed in True Up
1	Non-Tariff Income including DPS	**a**	9.34	7.45
2	Less: Cost of Borrowing for DPS	**b**	(1.91)	(2.09)
3	**Non-Tariff Income (net)**	**c=a-b**	7.43	5.35

4.21.16 Further, the Petitioner requested that Net Non-Tariff Income as claimed above for FY 2020-21 may be approved by the Commission.

Commission's Analysis

4.21.17 The Commission observed that the Petitioner in its True-up Petition for FY 2020-21 has claimed Non-Tariff income of Rs. 5.35 Crore excluding Rs. 2.09 Crore towards cost of borrowing of DPS further, the Commission observed that the NPCL has not submitted all the values available in the heads of Other Operating Income of Schedule 28 (except Consumer Contribution) and Other Income of Schedule 29 of the Audited Accounts for FY 2020-21 while calculating the Non-Tariff Income. The Commission sought justification for exclusion of the same and to revise the submission as per MYT regulations and recalculate the ARR. In reply to the Commission query NPCL submitted the reconciliation of non-tariff income as under:

TABLE 4-108: RECONCILATION OF NON-TARIFF INCOME AS SUBMITTED BY THE PETITIONER

Sl. No.	Description	Amount (Rs. Crore)		Remark
1	Delayed payment charges	**5.25**	5.25	Please refer to Note-29 of Audited Accounts
2	Processing charges	0.30	1.22	Please refer to Note-28 of Audited Accounts
3	Disconnection and reconnection fees	0.84		Please refer to Note-28 of Audited Accounts
	Cheque Return Charges	0.08		Reclassified from Other Misc. Income, Please refer Note-29 of Audited Accounts
5	Interest on investment & Dividend	**0.13**	0.13	Please refer to Note-29 of Audited Accounts
4	Meter testing charges	**0.15**	0.85	Please refer to Note-28 of Audited Accounts
6	Liquidated Damages	0.16		Please refer to Note-29 of Audited Accounts
	Supervision Charges	0.29		Please refer to Note-29 of Audited Accounts
7	Other Miscellaneous income	0.25		Reclassified from Other Misc. Income, Please refer Note-29 of Audited Accounts
8	**Non Tariff Income**	**7.45**	**7.45**	
9	Interest Income on Non-current Investment	13.85	-	Please refer to Note-29 of Audited Accounts. **Not considered in ARR being Treasury Income as explained here-in-below.**
10	Gain on sale of short term investments	1.13	-	Please refer to Note-29 of Audited Accounts. **Not considered in ARR being Treasury Income as explained here-in-below.**
11	Gain on fair valuation of non-current investments	0.57	-	Reclassified from Other Misc. Income, Please refer Note-29 of Audited Accounts. **Non considered in ARR being notional Ind-AS adjustment**
	Subtotal	**23.00**	**7.45**	
12	Less: Cost of Financing for DPS	-	2.09	
13	**Non-Tariff Income (Net)**	**23.00**	**5.35**	
Total may not tally due to rounding offs				

4.21.18 The Petitioner submitted that Other income as shown above excludes Income from treasury operations of Rs. 14.98 Crore as these Income is generated upon the funds accrued through internal resources which remained surplus even after fulfilling its obligations towards the capital expenditure or other operational purposes. Since this income has been generated out of the utilisation of internal funds of the Company, the same has not been considered as part of ARR. Such income from treasury activity is income earned from internal accruals / shareholders funds and are not part of regulatory business of the Company. Therefore, income earned has not been considered as part of the Non-Tariff Income.

4.21.19 The Petitioner submitted that the other income also excludes Notional Gain on fair value of non-current Investment amounting to Rs. 0.57 Crore.

4.21.20 The Petitioner submitted that the Commission has been allowing the Cost of Borrowing for Delayed Payment Surcharge starting with Tariff Order dated October 19, 2012 where it observed as follows:-

> *"6.15.6 It is quite apparent that delayed payment surcharge belongs to the period beyond normative period for which the licensee is not compensated at the time of computation of interest on working capital. Thus, to appropriately compensate for the cost incurred for financing that deferred payment beyond the normative period, the Commission in this order approves to reduce the amount of non-tariff income by the financing costs of DPS.*
>
> *6.15.7 The financing cost of delayed payment surcharge is computed by the Commission based on the actual DPS for the year. The DPS is grossed up conservatively based on the highest applicable surcharge rate which is 1.5% per month. Further, the financing cost is arrived at on the grossed-up amount and the weighted average SBI PLR rate applicable."*

4.21.21 From the above, it is apparent that the DPS accrues on receivables outstanding beyond the normative period of 45 days being considered for approving the normative working capital fund. Accordingly, receivables on which DPS accrues are funded by the licensee which has also been acknowledged by the Commission in its various previous orders.

4.21.22 The Petitioner submitted that it needs to fund such overdue receivables either through borrowings or from its own sources and in either of cases, it is entitled to be compensated with the cost of financing the same. Therefore, existence / non-existence of loans or incurrence of funding cost against DPS is not relevant for computation of compensatory normative allowance of cost of funding DPS.

4.21.23 The Petitioner submitted that the fact that the Company need allowance for cost of financing of delayed payment is well acknowledged in Commissions in earlier tariff orders as well as the same is evident from the proviso to Regulation-45.3 of the MYT Regulations, 2019 as reproduced below:-

> *"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."*

4.21.24 The Petitioner submitted that in its various submissions, it has highlighted that the banks / non-banking financial institutions (NBFCs) provides funding only up-to 75% of 60 days of debtors and the licensee has to fund such delayed recovery of dues / receivables through Promoters' Equity. Thus, the Company effectively bears the cost of funding of Delayed Payments at the rate of 10.93% (i.e. 75% of 9.57% being Interest on Working Capital and 25% of 15% being Return on Equity). However, as the Commission treats such excess equity as debt only (for the purpose of Capex / Working Capital/deferred receivables etc.) and has been earlier approving the cost of financing DPS on normative basis being computed by grossing up actual DPS for the year on highest applicable surcharge rate i.e. 2% per month and applying the normative rate of interest considered for working capital loan i.e. weighted average SBI MCLR on principle amount so computed. Therefore, without prejudice to its rights, the Company has considered the RoI of 9.57% being the weighted average SBI MCLR for determination of cost of borrowing of Delayed Payment Surcharge.

4.21.25 Accordingly, based on the above principles, the cost of borrowing in respect of Delayed Payment Surcharge for Control Period has been computed as shown in Table below:-

Particulars	Reference	Amount

Delayed Payment Surcharge Received	a	5.25
Working Capital Amount Utilisation @ 24% p.a.	b= (a / 24%)	21.87
Applicable Interest Rate for Working Capital Finance	c	9.57%
Cost of Borrowing for DPS	**d=b x c**	**2.09**

4.21.26 Accordingly, the non-tariff income has been considered after reducing the cost of borrowing of deferred payment beyond normative period from the total non- tariff income

4.21.27 Taking into consideration, the Commission reiterates its views taken in Tariff Order for FY 2021-22 dated August 24,2021 while Truing up of FY 2019-20 as under:

- The UPERC MYT Regulations, 2014 do not provide any methodology / provision of computing the quantum of DPS & its financing cost, therefore it cannot be taken as normative.
- However, 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.

4.21.28 Hence, the Commission has disallowed the financing cost of DPS of Rs. 2.09 Crore claimed by the Petitioner for FY 2020-21.

4.21.29 The Commission observed that the Non-Tariff income claimed by the petitioner is Rs. 5.35 Crore, However the Audited accounts provides the details of Non-tariff income of Rs. 22.99 Crore as detailed in the Note 28 and Note 29 of the audited accounts as shown below.

TABLE 4-109: DETAILS OF NON-TARIFF INCOME AS PER AUDITED ACCOUNTS

Sl. No.	Description	Amount (Rs. Cr.)	Remark
1	Processing Charges	0.30	Note-28 of Audited Accounts
2	Disconnection and reconnection fees	0.84	Note-28 of Audited Accounts
3	Meter Testing Charges	0.15	Note-28 of Audited Accounts
4	On Non current investments	0.11	Note-29 of Audited Accounts
5	On Bank deposits	13.85	Note-29 of Audited Accounts

Sl. No.	Description	Amount (Rs. Cr.)	Remark
6	other	0.00	Note-29 of Audited Accounts
7	Dividend Income	0.01	Note-29 of Audited Accounts
8	Gain on sale of Short Term investments	1.13	Note-29 of Audited Accounts
9	Liquidated damages recovery	0.16	Note-29 of Audited Accounts
10	Supervision charges	0.29	Note-29 of Audited Accounts
11	Miscelleneous Income	0.90	Note-29 of Audited Accounts
12	Delayed Payment Surcharge	5.25	Note-29 of Audited Accounts
Total Non-Tariff income		**22.99**	

4.21.30 Therefore, the Commission has considered the non-tariff Income Rs. 22.99 Crore as shown in the table below.

TABLE 4-110: NET NON-TARIFF INCOME FOR FY 2020-21 APPROVED BY THE COMMISSION (RS. CRORE.)

Sl. No.	Particulars	Ref.	Approved in TO dated 12.04.2020	Petition	Approved
1	Non-Tariff Income including DPS	A	-	7.45	-
2	Less: Cost of Borrowing for DPS	B	-	(2.09)	-
3	Net Non- Tariff Income	**C=A-B**	**7.43**	**5.35**	**22.99**

4.22 REVENUE FROM SALE OF POWER

4.22.1 The Petitioner submitted the actual category-wise sales, revenue and average realization for FY 2020-21 as per Audited Annual Accounts are given in the Table below.

TABLE 4-111: CATEGORY WISE SALES AND REVENUE FOR FY 2020-21

Sl. No.	Category	Sales (MU)	Revenue (Rs. Cr.)	ABR (Rs./kWh)
1	LMV-1: Domestic Light, Fan & Power	617.44	409.11	6.63
2	LMV-2: Non-Domestic Light, Fan & Power	33.78	39.30	11.63
3	LMV-3: Public Lamps	31.06	28.72	9.25
4	LMV-4: Institutions	10.37	9.24	8.91
5	LMV-5: Private Tube Wells	19.47	4.38	2.25
6	LMV 6: Small and Medium Power	82.46	88.02	10.67
7	LMV-7: Public Water Works	22.54	24.88	11.04
8	LMV-8: STW and Pumped Canals	0.09	0.21	24.43
9	LMV-9: Temporary Supply	43.88	56.75	12.93
10	HV-1: Non Industrial Bulk Power	164.77	191.32	11.61
11	HV-2: Large and Heavy Power	986.19	825.26	8.37
12	**Total**	**2,012.05**	**1,677.18**	**8.34**

4.22.2 The Petitioner submitted that the Commission had approved the sales and revenue at 2,002.96 MU and Rs. 1,639.07 Crore. respectively, based on various assumptions with respect to various factors like free and 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.

4.22.3 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 December 04, 2020.

4.22.4 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.

4.22.5 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”.

4.22.6 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: -

> *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 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 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.*

4.22.7 Thus, based on above, the Petitioner requested the Commission to true-up the sales and revenue for FY 2020-21 including the unmetered sales for LMV-1 and LMV-5 category on the basis of Audited Annual Accounts.

Commission's Analysis

4.22.8 The category-wise approved revenue from sale of power for FY 2020-21 is provided in the Table below:

TABLE 4-112: REVENUE AS APPROVED BY THE COMMISSION FOR FY 2020-21

Sl. No.	Category	Sales (MU)	Revenue (Rs. Cr.)	ABR (Rs./kWh)
1	LMV-1: Domestic Light, Fan & Power	617.44	409.11	6.63
2	LMV-2: Non-Domestic Light, Fan & Power	33.78	39.30	11.63
3	LMV-3: Public Lamps	31.06	28.72	9.25
4	LMV-4: Institutions	10.37	9.24	8.91
5	LMV-5: Private Tube Wells	19.47	4.38	2.25
6	LMV 6: Small and Medium Power	82.46	88.02	10.67
7	LMV-7: Public Water Works	22.54	24.88	11.04
8	LMV-8: STW and Pumped Canals	0.09	0.21	24.43
9	LMV-9: Temporary Supply	43.88	56.75	12.93
10	HV-1: Non Industrial Bulk Power	164.77	191.32	11.61
11	HV-2: Large and Heavy Power	986.19	825.26	8.37
12	**Total**	**2,012.05**	**1,677.18**	**8.34**

4.22.9 In addition to the above revenue, the Commission, as discussed in the preceding paragraphs, has computed the deemed revenue from own consumption considering the LMV-4(B) tariff as under:

Particulars	Units	Value
Own consumption	MU	2.50
LMV-4(B) Tariff (highest slab)		
Fixed charges	Rs./kW/month	400
Energy Charges	Rs./kWh	9.30
Projected Contract Load (kW)*	kW	572
Deemed revenue		
Fixed Charges (Considering load factor of 50% for conversion from kWh to kW)	Rs. Crore	0.27
Energy Charges	Rs. Crore	2.33
Total deemed revenue	**Rs. Crore**	**2.60**

** As actual is not available. So, the Projected Contract Load (kW) as 2.50MU/(0.5*24*365)=572 kW has been considered. Load factor of 0.5 has been considered as per Electricity Supply Code.*

4.22.10 Based on the above, the total revenue for FY 2020-21 works out as Rs. 1679.78 Crore (1677.18+2.60). The power purchase cost of extra units purchased comes to Rs. 0.91 Crore, whereas the revenue is considered as Rs. 2.60 Crore, which resulted in a net benefit of Rs. 1.69 Crore.

4.23 ARR AND REVENUE GAP

4.23.1 Based on above mentioned Revenue, Expenditure and Return on Equity, the

Aggregate Revenue Requirement for FY 2020-21 as computed on the basis of the MYT Regulations, 2019 and Commission's Tariff Orders is given in Table below:

TABLE 4-113: SUMMARY OF ARR FOR TRUE UP SUBMITTED BY NPCL FOR FY 2020-21 (RS.CRORE)

Sl. No.	Particulars	Approved	Claimed in True Up
1	Power Purchase Expenses for the Year	804.00	1,002.70
2	Transmission Charges	158.19	154.42
3	Net Employee cost (Incl. Retiral Benefits)	15.94	46.47
4	A&G expenses	13.37	13.06
5	R&M expenses	34.97	45.43
6	Interest Charges	64.38	66.49
7	Depreciation	44.58	49.95
8	Taxes (Income Tax & MAT)	32.98	22.75
9	Provision for Bad & Doubtful Debts	13.82	17.78
10	Loss on Sale of Assets	-	0.47
11	Change in Law (Impact of GST)	-	1.41
12	Efficiency Gains	-	0.05
13	Return on Equity	61.40	67.65
14	Contingency Reserve	-	4.20
15	Annual Revenue Requirement	**1,243.63**	**1,492.85**
16	Less: Revenue from Existing Tariff	1,639.07	1,677.18
17	Less: Non-Tariff Income	7.43	5.35
18	Revenue Gap/ (Surplus)	**(402.86)**	**(189.69)**
19	Revenue Gap /(Surplus) from Prev. Year	(4.28)	306.25
20	Carrying Cost of Regulatory Asset	-	20.24
21	Total Revenue Gap /(Surplus)	**(407.14)**	**136.80**
Note: The sum and deduction may not match due to rounding off.			

Commission's Analysis:

4.23.2 Based on the above approvals, the summary of Aggregate Revenue Requirement, Revenue Gap / (Surplus) for the NPCL for FY 2020-21 is summarized below:

TABLE 4-114: SUMMARY OF ARR AS APPROVED BY COMMISSION FOR FY 2020-21 (RS. CRORE)

Particular	Tariff Order for FY 2020-21 dated 04.12.2020	Petition	Approved
Power Purchase Expenses	804.00	1002.70	890.83
Disallowance in PPC due to excess unmetered sales	-	-	4.64
Transmission Charges (UPPTCL+PGCIL)	158.19	154.42	152.19
Employee cost	24.94	56.29	29.49
A&G expenses	13.37	13.06	13.06
R&M expenses	34.97	45.43	38.25

Particular	Tariff Order for FY 2020-21 dated 04.12.2020	Petition	Approved
Smart Metering / DT Metering / SOP implementation OPEX	0.00	0.00	0.00
Gross O&M Expenses	**73.28**	**114.78**	**80.80**
Interest charges	64.38	66.49	50.05
Depreciation	44.58	49.95	33.90
Contingency Reserve	0.00	4.20	0.00
Income Tax	32.98	22.75	16.36
Gross Expenditure	**1177.41**	**1415.30**	**1219.50**
Employee cost capitalized	9.00	9.82	9.82
Interest capitalized	0.00	0.00	0.00
A&G expenses capitalized	0.00	0.00	0.00
Net Expenditure	**1168.41**	**1405.48**	**1209.68**
GST Impact	0.00	1.41	0.00
Provision for Bad & Doubtful debts	13.82	17.78	16.93
Miscellaneous Expenses	0.00	0.47	0.00
Total net expenditure with provisions	**1182.23**	**1425.14**	**1226.61**
Add: Reasonable Return / Return on Equity	61.40	67.65	48.65
Less: Non-Tariff Income	7.43	5.35	22.99
Add: Efficiency Gains	0.00	0.05	0.00
Annual Revenue Requirement (ARR)	**1236.20**	**1487.50**	**1252.27**
Revenue from approved Tariffs	**1639.07**	**1677.18**	**1679.78**
Revenue Gap/ (Surplus)	(402.87)	(189.69)	(427.51)

4.23.3 As observed from above Tables, against the revenue surplus of total of Rs. 189.69 Crore claimed by the NPCL for truing up of FY 2020-21, the Commission has worked out the surplus of total of Rs. 427.50 Crore.

TABLE 4-115: SUMMARY OF ARR AS APPROVED BY COMMISSION FOR FY 2020-21 (RS. CRORE)

Parameters	FY 2019-20 (Approved)	FY 2020-21 (Approved)	%Change
Total Sales (MU)	2,080.65	2,014.56	-3.18%
Revenue from Tariff (Rs. Crore)	1,698.86	1679.78	-1.12%
Total Power Purchase (MU)	2,261.58	2187.83	-3.26%
Total Power Purchase (Rs. Crore)	1055.63	1038.39	-1.63%
ARR (Rs. Crore)	1273.14	1252.27	-1.64%
APPC (Rs./kWh)	4.10	4.05	-1.21%
APPC including Transmission (Inter + Intra) (Rs./kWh)	4.67	4.75	1.63%
ABR (Rs. /kWh)	8.17	8.34	2.06%
ACoS (Rs./kWh)	6.12	6.22	1.57%

5 ANNUAL PERFORMANCE REVIEW OF FY 2021-22

5.1 INTRODUCTION

5.1.1 In this Chapter the Commission has carried out the Annual Performance Review for FY 2021-22 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 2021-22. The Commission has carried out comparison of each component of APR as claimed by the Petitioner with that approved Tariff Order for FY 2021-22. The Commission will carry out the detailed prudence check of various components of ARR for FY 2021-22 while carrying out the truing up for FY 2021-22.

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 2021-22 are 1,29,641 and 1,295.57 MW, respectively, as given in the following Table:

TABLE 5-1: NO. OF CONSUMERS AND CONNECTED LOAD SUBMITTED BY THE PETITIONER FOR FY 2021-22 (APR)

Category	No. of Consumers (No.)	Connected Load (MW)
LMV-1: Domestic Light, Fan & Power	1,17,831	494.26
LMV-2: Non-Domestic Light, Fan & Power	3,856	34.54
LMV-3: Public Lamps	365	11.60
LMV-4: Institutions	528	6.99
LMV-5: Private Tube Wells	1,263	6.31
LMV 6: Small and Medium Power	3,597	84.42
LMV-7: Public Water Works	253	9.08
LMV-8: STW and Pumped Canals	8	0.10
LMV-9: Temporary Supply	761	19.69
LMV-11: Electric Vehicle Charging	38	2.60
HV-1: Non-Industrial Bulk Power	239	141.80
HV-2: Large and Heavy Power	902	484.18
Total	**1,29,641**	**1,295.57**

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 has made a comparison of number of consumers as submitted by the Petitioner in True-Up for FY 2020-21 with the number of consumers submitted for FY 2021-22 as shown in the Table below:

TABLE 5-2: CATEGORY-WISE NO. OF CONSUMERS FOR FY 2021-22 SUBMITTED BY THE PETITIONER

Category	Claimed in true-up of FY 2020-21	Claimed in APR of FY 2021-22	Percentage increase / decrease
LMV-1: Domestic Light, Fan & Power	95,855	1,17,831	22.93%
LMV-2: Non-Domestic Light, Fan & Power	3,336	3,856	15.59%
LMV-3: Public Lamps	342	365	6.73%
LMV-4: Institutions	520	528	1.54%
LMV-5: Private Tube Wells	1,249	1,263	1.12%
LMV 6: Small and Medium Power	3,324	3,597	8.21%

Category	Claimed in true-up of FY 2020-21	Claimed in APR of FY 2021-22	Percentage increase / decrease
LMV-7: Public Water Works	246	253	2.85%
LMV-8: STW and Pumped Canals	8	8	0.00%
LMV-9: Temporary Supply	751	761	1.33%
LMV-11: Electric Vehicle Charging	0	38	-
HV-1: Non-Industrial Bulk Power	218	239	9.63%
HV-2: Large and Heavy Power	858	902	5.13%
Total	1,06,707	1,29,641	21.49%

5.2.4 It can be observed from above that the number of consumers in LMV-8 category has remained same and in LMV-9 category has increased, and correspondingly the connected load for LMV-8 and LMV-9 has decreased.

5.2.5 The Commission has also made a comparison of Energy demand (in MW) as submitted by the Petitioner in True-Up of FY 2020-21 along with the Energy demand as submitted by the Petitioner in APR for FY 2021-22, as shown in the Table below:

TABLE 5-3: CATEGORY WISE CONNECTED LOAD (MW) SUBMITTED BY THE PETITIONER FOR FY 2021-22

Category	Connected Load for FY 2020-21	Connected Load for FY 2021-22	Percentage increase / decrease
LMV-1: Domestic Light, Fan & Power	449.49	494.26	9.96%
LMV-2: Non-Domestic Light, Fan & Power	28.21	34.54	22.45%
LMV-3: Public Lamps	10.93	11.60	6.14%
LMV-4: Institutions	6.83	6.99	2.30%
LMV-5: Private Tube Wells	6.16	6.31	2.52%
LMV 6: Small and Medium Power	76.56	84.42	10.27%
LMV-7: Public Water Works	8.45	9.08	7.56%
LMV-8: STW and Pumped Canals	0.10	0.10	-0.23%
LMV-9: Temporary Supply	19.72	19.69	-0.17%
LMV-11: Electric Vehicle Charging	0.00	2.60	
HV-1: Non-Industrial Bulk Power	116.17	141.80	22.06%
HV-2: Large and Heavy Power	423.96	484.18	14.20%
Total	**1,146.58**	**1,295.57**	**13.00%**

5.2.6 Further analysis of billing determinants for FY 2021-22 would be carried out during True-Up proceedings of FY 2021-22, subject to prudence check by the Commission.

5.3 ENERGY SALES

Petitioner's Submission

5.3.1 The Petitioner has submitted that during FY 2021-22, it has so far witnessed unrestricted peak demand of upto 522 MW on July 07, 2021 (post lockdown) as compared to the peak demand of 446 MW in the previous year i.e., FY 2020-21. Based on the provisional sales till September 30, 2021, and estimated demand from October 2021 to March 2022, the Petitioner has now estimated the sales for FY 2021-22 at 2375.84 MU.

TABLE 5-4: ENERGY SALES AND REVENUE APPROVED BY THE COMMISSION FOR FY 2021-22

Sl. No.	Category	Sales (MU's)	Revenue (Rs. Cr.)	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
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
13	**Total**	**2,473.57**	**2,049.03**	**8.28**

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 2020-21 along with the Energy demand as submitted by the Petitioner in APR for FY 2021-22, as shown in the Table below:

TABLE 5-5: ENERGY SALES SUBMITTED BY THE PETITIONER FOR FY 2021-22 (MU)

Category	Submitted for FY 2020-21	Submitted for FY 2021-22	Percentage increase/ decrease
LMV-1: Domestic Light, Fan & Power	617.44	712.52	15.40%
LMV-2: Non-Domestic Light, Fan & Power	33.78	41.57	23.06%
LMV-3: Public Lamps	31.06	35.59	14.61%

Category	Submitted for FY 2020-21	Submitted for FY 2021-22	Percentage increase/ decrease
LMV-4: Institutic`ons	10.37	15.78	52.16%
LMV-5: Private Tube Wells	19.47	18.88	-3.01%
LMV 6: Small and Medium Power	82.46	103.00	24.91%
LMV-7: Public Water Works	22.54	24.12	7.02%
LMV-8: STW and Pumped Canals	0.09	0.09	0.24%
LMV-9: Temporary Supply	43.88	48.41	10.31%
LMV-11: Electric Vehicle Charging	0.00	1.80	-
HV-1: Non-Industrial Bulk Power	164.77	240.88	46.19%
HV-2: Large and Heavy Power	986.19	1,133.19	14.91%
Total	**2,012.05**	**2,375.84**	**18.08%**

5.3.3 From the above Table, the Commission has observed that the Energy Sales for all the categories have increased except for LMV-5. The Petitioner has submitted that Commission vide its Tariff Order dated August 26, 2021 approved the Energy Sale for FY 2021-22 at 2,473.57 MU. The Commission has observed that total energy sales as submitted by the Petitioner for FY 2021-22 are lower than the energy sales approved by the Commission in its Tariff Order dated August 26, 2021 for FY 2021-22. The category wise sales approved for FY 2021-22 vis-à-vis sales as submitted for FY 2021-22 is shown in the Table below:

TABLE 5-6: CATEGORY-WISE ENERGY SALES FOR FY 2021-22 (MU)

S. No.	Category	Tariff Order for FY 2021-22 dated 26.07.2021	Claimed in APR	Percentage Increase / Decrease
1	LMV-1: Domestic Light, Fan & Power	767.63	712.52	-7.18%
2	LMV-2: Non-Domestic Light, Fan & Power	50.71	41.57	-18.03%
3	LMV-3: Public Lamps	37.52	35.59	-5.13%
4	LMV-4: Institutions	19.95	15.78	-20.88%
5	LMV-5: Private Tube Wells	25.49	18.88	-25.92%
6	LMV 6: Small and Medium Power	112.72	103.00	-8.62%
7	LMV-7: Public Water Works	25.13	24.12	-4.00%
8	LMV-8: STW and Pumped Canals	0.09	0.09	-5.12%
9	LMV-9: Temporary Supply	44.80	48.41	8.05%
10	LMV-11: Electric Vehicle Charging	5.48	1.80	-67.08%
11	HV-1: Non-Industrial Bulk Power	319.98	240.88	-24.72%
12	HV-2: Large and Heavy Power	1,064.07	1,133.19	6.50%
	Total	**2,473.57**	**2,375.84**	**-3.95%**

5.3.4 From the above Table, it can be observed that the Energy sales for all the categories has decreased except for LMV-9 and HV-2. Further, the Commission has observed from the above table that overall category sales have also decreased.

5.3.5 The Petitioner should improve on its forecasting techniques and specifically work towards improving the sales for better revenue growth.

5.3.6 Further analysis of Energy Sales for FY 2021-22 would be carried out during the True-Up of FY 2021-22 proceedings subject to prudence check by the Commission.

5.4 ENERGY BALANCE AND DISTRIBUTION LOSSES

Petitioner's Submission

5.4.1 The Petitioner stated that the COVID-19 pandemic caused major disruption globally and in India since March, 2020 starting with complete lock down, total restriction in containment zones, complete restriction on movement of people / goods, guidelines on quarantine, partial lock down, imposition of Section 144 and Curfews during weekends & nights, etc. Gautam Buddha Nagar district covering Noida & Greater Noida was amongst the highest COVID-19 infected districts and was subjected to severe restriction / disruption in work. Even, during Apr-May, 2021 sudden spurt of COVID-19 again pushed back the momentum gained in preceding 5-6 months and completely stalled / disrupted loss control activities of the Petitioner resulting into higher theft and T & D losses. Gautam Buddha Nagar district covering Noida & Greater Noida was amongst highest reporting COVID-19 infection resulting in to severe restriction / disruption in work. Again, during November, 2020 sudden spurt of COVID-19 pushed back the momentum gained in preceding 2-3 months.

5.4.2 The Petitioner submitted that in view of the above, the industrial, commercial and institutional loads were severely impacted whereas domestic load (both in rural and urban areas) increased significantly resulting in significant change in the consumption mix i.e., much lower HT sales, higher LT sales and higher T & D losses.

5.4.3 The Petitioner submitted that till June, 2021 the complete focus was to maintain 24X7 power supply in Greater Noida and promptly attending complaints, if any, relating thereto. All other activities including new connection, loss control etc. were kept in abeyance to ensure safety from COVID-19 infection in order to strictly follow the guidelines issued by the central / State Govt. from time to time.

5.4.4 The Petitioner further stated that it has been striving to implement / emulate efficient, resilient, robust, inclusive, tailor-made initiatives to tackle the ever-rising menace i.e., commercial loss, which all distribution utilities are struggling hard to chain. While many initiatives tendered significant results but sometimes most worthy models failed due to the volatile environment, which are beyond the control of the Distribution licensee. Some of these issues significantly giving rise to pilferage are as follows-

i) Local Authority restraining the Petitioner from providing electricity connection in unplanned and un-authorized colonies leading to unauthorized tapping of energy. The menace has been quite high in Doob area of Greater Noida which is witnessing rapid build-up of colonies with growing urbanization and all-round development.

ii) Greater Noida being a developing city with many vacant residential premises, has attracted unauthorized occupants in urban areas who also indulge in hooking and tapping of electricity.

iii) In villages and unauthorised colonies, due to lack of planned development and no authority for approving “Naksha”, at many places, the electrical network is being exploited to such a level where even the electrical poles / transformers are being covered within the boundary / four wall of the houses leading to theft / pilferage. Due to widespread land acquisition in Greater Noida, allocation of certain percentage of land to farmers and development of private colonies and allocation, the above practice is quite frequent and wide spread in Greater Noida Area.

iv) Increased hours of supply in rural areas i.e., from 12-16 hours to at-least 18-22 hrs in accordance with the State Government directions. In this regard, a letter no. 1686/24-P-3-2018 dated August 03, 2018, was received from the Principal Secretary (Energy), Govt. of UP, wherein the Petitioner was directed to provide 18 hours’ power supply in villages failing which action will be taken against the

Petitioner in accordance with the conditions of license of the Petitioner. Therefore, the Petitioner had to further increase power supply in villages. However, it'll result into higher T&D losses and bad debts due to non-payment of bills.

v) Earlier, the Petitioner was able to contain T & D loss at 8% by curtailing load in the loss prone areas but with the strict direction to increase power supply in rural areas for at-least 18 hours irrespective of high losses and non-payment of bills, the T&D Loss cannot be contained at 8% level. Further, these villagers are adding many of the electrical/electronic items such as air conditioners, large TVs, washing machines, mobile phone, Laptops etc., without paying their electricity dues. This has seriously impacted the Petitioner's efforts to contain its losses at 8%.

vi) Poll bound activities and farmer's agitation which are beyond the control of the Petitioner.

vii) As on October 31, 2021, 11592 cases are pending in Special Courts, 4572 cases are awaiting in the process of filing in Special Court, 840 FIRs are pending for investigation by the Police. Due to the inaction of judicial/administrative bodies, the enforcement drives conducted by the Petitioner becomes ineffective and does not yield desired results.

5.4.5 Accordingly, the Energy Balance for FY 2021-22, 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 2021-22

Particulars	U.o.M.	Tariff Order for FY 2021-22 dated 26.07.2021	Claimed in APR
Energy Purchase	MU	2,682.83	2,586.66
Distribution Losses	MU	209.26	210.82
Distribution Losses	%	7.80%	8.15%
Energy Sales	MU	2,473.57	2,375.84

5.4.6 The Petitioner submitted that the Commission is empowered under Regulation 56 of the MYT Regulations, 2019 i.e., "Power to remove difficulties" to approve T&D losses of 8.15% as against T&D Loss of 7.80% approved vide MYT Order dated

November 26, 2020 considering the adverse impact on the operations of the Petitioner due COVID -19 pandemic and other reasons as explained above.

Commission's Analysis

5.4.7 The Commission has observed that in the APR, the Energy Balance for FY 2021-22, Petitioner has shown Distribution Loss of 8.15%, which is higher than the approved loss of 7.80%. Further analysis of Energy Balance and Distribution Loss for FY 2021-22 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 FY 2021-22 remained a challenging year for every power utility in the Country owing to second wave of COVID-19 and unprecedented coal crisis. While the second wave severely impacted the demand of the consumers, coal shortage increased the power market rates to an exceptionally high level.

5.5.2 In the above backdrop, the following is the estimated power purchase cost and energy requirement for FY 2021-22 based on the contracts executed by the Petitioner:

Power Procurement from LTPPA

5.5.3 The PPA with M/s Dhariwal Infrastructure Ltd. (DIL) was approved by the Commission vide its order dated April 20, 2016. During FY 2021-22, the drawl under the aforesaid LTPPA is estimated at 1265.82 MU which is equivalent to normative Availability of 85% specified in the Regulation 26, Generation Tariff Regulations, 2019 of UPERC.

5.5.4 The Petitioner submitted that during the period from Apr-Sep 2021, M/s DIL has raised the bills for the fixed Cost at Rs 1.87 per kWh and energy Cost including escalation as per CERC escalation index at Rs 2.93 per kWh in pursuance of the Tariff Order dated February 05, 2019. Further, for the period from Oct 2021Mar2022, the Petitioner has computed the cost of power on the basis of tariff proposed by M/s DIL in its Petition No. 1531 for determination of tariff for FY 2019-20 to FY 2023-24. The Petitioner submitted that the fixed Charges and energy Charges have been considered following the principles / methodology as approved in DIL's Tariff Order dated February 05, 2019.

5.5.5 The Petitioner submitted that, the tariffs approved vide Order dated February 05, 2019 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.

5.5.6 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 2021-22.

5.5.7 The Petitioner added that, M/s DIL has filed its True-Up petition for FY 2016-17 to FY 2018-19 on August 14, 2019 and MYT Petition no. 1531 of 2019 for determination of tariff for the control period from FY 2019-20 to FY 2023-24 in accordance with UPERC Terms and Conditions of Generation Tariff Regulations, 2019 November 20, 2019, which are pending before the Commission. Any impact on the power purchase cost pursuant to the Order of the Commission on the above petitions would be consequently claimed by the Petitioner in the ARR / APR / Truing-up petitions as the case may be.

5.5.8 The Petitioner submitted that, in addition to above, following Petitions filled by DIL are also pending before the Commission for:

- Petition No. 1630/2019 for Prudence Check and use of Additional Coal in FY 2019-20
- Petition Non. 1654/2020 for truing-up of the 'Change in Law' claims of FY 2019-20

- Petition No. 1655/2020 seeking compensation due to increase in Chhattisgarh Environment Cess and Chhattisgarh Development Cess as a 'Change in Law' event
- Petition No. 1651/2020 for approval of capital expenditure on account of installation of FGD system as 'Change in Law' event

5.5.9 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.

Power Procurement from MTPPA:

5.5.10 The Petitioner submitted during FY 2020-21, 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 5-8: POWER PROCURED FROM MEDIUM TERM SOURCE FOR FY 2021-22-AS SUBMITTED BY PETITIONER

Vendor	Source	Capacity	Duration	Period	Nature
APPCPL	DoP, GoAP	50 MW	RTC	Apr-Sep	Large Hydro
		25MW	4 Hrs	Oct-Nov	
		25MW	2 Hrs	Dec-Mar	
	DoP, GoN	25 MW	RTC	Apr-Sep	
		25MW	4 Hrs	Oct-Nov	
		25MW	2 Hrs	Dec-Mar	

5.5.11 The Petitioner submitted that the landed tariff discovered through bidding is Rs. 5.46 per unit at NPCL Bus based on the then prevailing transmission charges and losses, and the same was approved by the Commission vide Order February 28, 2020 along with respective medium-term power purchase agreements.

5.5.12 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. The relevant extract of the MTPPA is reproduced below:

> *"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…….."

5.5.13 Accordingly, based on the applicable transmission charges and losses for Inter-State and Intra-State Transmission Utilities, the Petitioner has estimated to procure 200.19 MU power from DoP, GoAP and 105.83 MU from DoP, GoN at the landed cost of Rs 5.04/kWh and Rs 4.83/kWh respectively. The Petitioner further submitted that, during FY 2021-22, based on the load profile, the Petitioner has tied-up following additional Medium-Term Power through Competitive Bidding held on Deep Portal in accordance with the Guidelines of Central Government:

TABLE 5-9: MTTPPA AGREEMENTS SUBMITTED BY THE PETITIONER

Vendor	Source	Capacity	Duration	Period	Nature
APPCPL	Goodwill Energy, H.P.	15 MW	RTC	May-Sep	Large Hydro
TPTCL	GoHP	45 MW	RTC	May-Sep	

5.5.14 The Petitioner submitted that the landed tariff discovered through bidding is Rs. 4.43 per unit at NPCL Bus based on the then prevailing transmission charges and losses, which was approved by the Commission vide Order dated May 10, 2021, alongwith respective medium-term power purchase agreements.

5.5.15 The Petitioner further submitted that the above tariff was also based on 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.

5.5.16 Accordingly, based on the applicable transmission charges and losses for Inter-State and Intra-State Transmission Utilities, the Petitioner has estimated to procure 33.22 MU power from Arunachal Pradesh Power Corporation (P) Limited (APPCPL) and 109.55 MU from Tata Power Trading Company Limited (TPTCL) at the landed cost of Rs. 3.87/kWh and Rs 3.65/kWh respectively The Petitioner has mentioned that the above power purchase cost from Medium Term Agreements have been estimated based on bills raised by respective vendors for the period Apr'21 - Sep'21 and applicable tariff, transmission charges & losses for the remaining period of Oct 2021-Mar 2022 as per approved PPAs.

Power Procurement from Short Term Sources:

5.5.17 During FY 2021-22, the Petitioner has estimated to procure 635.84 MU power short term sources.

5.5.18 The Petitioner submitted that PPAs in respect of power purchase from M/s APPCPL

(Source: HSPPL, HP), M/s APPCPL (Source: SEIL, AP) and M/s TPTCL (Source: Jindal Power, Chhattisgarh) along with the tariff discovered on DEEP Portal has been approved by the Commission vide its Order dated October 25, 2021.

5.5.19 The Petitioner submitted that apart from the above, keeping the recent volatility in IEX rate, it has planned to procure day and peak power through competitive bidding with prior approval of the Commission. Meanwhile, for the purpose of estimating the cost of Short Term (ST) power, the Petitioner has considered the procurement of remaining untied power during Oct-Mar 2022 from power exchange on the following assumptions: -

i) 93.78 MU Peak Power estimated at Average IEX Rate for Evening Peak Power during Oct 2021 to Mar 2022

ii) 296.74 MU off-Peak Power estimated at Average IEX Rate for Day & Morning Power during Oct 2021 to Mar 2022

Power Procurement from Renewable Sources:

5.5.20 The Petitioner submitted that, it has executed following renewable power purchase agreements in order to meet Solar & Non-Solar Renewable Purchase Obligations (RPO) along with Hydrogen Purchase Obligations (HPO):

i) LTPPA for 1 MW 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 proposed to procure 1.27 MU at landed tariff of Rs. 6.99 per kWh at NPCL bus.

ii) LTPPA for 10 MW Wind power with PTC India Limited signed on June 27, 2017 and approved by the Commission vide order dated January 05, 2018 under the Ministry of Renewable Energy (MNRE) Scheme for Setting up of 1000 MW ISTS connected Wind Power Projects for which the Solar Energy Corporation of India Ltd. (SECI) was identified as the “Nodal Agency” for selection of bidder. The Petitioner is expecting to draw 34.81 MU at Rs. 3.85 per kWh landed at NPCL bus.

iii) The Petitioner, in order to meet its RPO, 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 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 Petitioner 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 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 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 0.45 MU at Rs 5.44 per kWh rooftop solar plants set-up by M/s APPCPL at the Petitioner's establishments to help the Petitioner in execution of DSM plan under intimation to the UPERC vide Petitioner letter dated March 17, 2017.

iv) The Petitioner is also expecting 5.34 MU from the net-metered consumers having Net-metering agreements for around 24 MW solar power.

v) Long Term Power Purchase Agreements 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 orders dated September 18, 2019 and the Petitioner estimate to procure the long-term solar power of 18.00 MU is Rs 3.20/ kWh from Tata power w.e.f. November 27, 2021 and 55.05 MU is Rs 3.17/kwh from Adani Solar for FY 2021-22.

a) The Petitioner submitted 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 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 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) Apart from the above, the Petitioner has tied short-term Non-Solar Renewable power from M/s APPCPL & M/s Kreate Energy (I) Private Limited in various hours during Apr’21-Sep’21 through competitive bidding at DEEP Portal. The same has been approved by the Commission vide Order dated April 20, 2021. The Petitioner has estimated drawl of 54.65 MU is Rs. 4.86 per kWh landed at NPCL-Bus from the above sources.

vii) The Remaining Short-fall of Non-Solar Renewable Power 135.71 MU is estimated to be procured from IEX (RE), out of which the Petitioner has already procured 52.94 MU is Rs 5.46/kwh till Sep 2021 whereas remaining power 82.77 MU is estimated to be procured during Oct 2021- Mar 2021 from at IEX (RE) subject to availability.

5.5.21 Based on above, summary of renewable power purchase during FY 2021-22 is provided in below: -

TABLE 5-10: RENEWABLE POWER SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Particulars	Tariff Order for FY 2021-22 dated 26.08.2021			Claimed in APR		
	Units (MU)	Rate/ kWh	Amount (Rs.Cr)	Units (MU)	Rate/ kWh	Amount (Rs.Cr)
APPCPL (DoP, Govt. of Nagaland)	6.77	4.69	3.17	6.24	4.84	3.02
APPCPL (DoP, Govt. of AP)	6.77	4.84	3.27	6.44	4.97	3.20
APPCPL (MePDCL, Govt. of Meghalaya)	29.97	4.75	14.24	26.74	4.84	12.94
M/s Kreate Energy -(E&PD), Govt. of Sikkim)	15.47	4.76	7.36	15.23	4.85	7.39
PTC (Wind Power)	33.90	3.89	13.20	34.81	3.85	13.39
Adani (Solar Power)	51.87	3.43	17.78	55.05	3.17	17.46
Tata (Solar Power)	-	-	-	18.00	3.20	5.76
GNIDA (Solar Power)	1.58	7.06	1.11	1.27	6.99	0.89
APPCPL (Solar Power)	-	-	-	0.45	5.44	0.25
Net Metering	-	-	-	5.34	7.91	4.22
Non-Solar-(IEX)	-	-	-	135.71	6.61	89.64
Excess RPO Solar	97.90	3.92	38.37	-	-	-
Excess RPO Non-Solar	221.26	4.65	102.95	-	-	-
Total RE Power	**465.46**	**4.33**	**201.46**	**305.28**	**5.18**	**158.15**

5.5.22 The Petitioner further estimated status of RPO in accordance with RPO Regulations is provided here-in-below:

TABLE 5-11: RPO STATUS SUBMITTED BY THE PETITIONER FOR FY 2021-22 (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	44.62	75.94	112.92	7.64
Non-Solar	140.52	113.91	225.17	29.25
Hydro Power	(12.71)	56.95	-	44.24
Total#	**172.42**	**246.80**	**338.09**	**81.13**

** including gross generation under net-metering arrangements*
 # Total may not tally due to rounding offs

5.5.23 The Petitioner submitted that in view of the above, the power purchase cost vis-à-vis the power purchase cost approved by the Commission vide Tariff Order dated August 26, 2021, is given in Table below:

TABLE 5-12: POWER PURCHASE COST SUBMITTED BY THE PETITIONER FOR FY 2021-22

Sl. No.	Particulars	Tariff Order for FY 2021-22 dated 26.07.2021			Claimed in APR		
	Source of Power Purchase	**MU's**	**Rs. / kWh**	**Amount Rs. Cr.**	**MU's**	**Rs. / kWh**	**Amount Rs. Cr.**
1	Power Purchase from LT	1,182.73	4.77	564.12	1,183.96	5.95	703.94
2	Power Purchase from MT	580.56	5.07	294.25	448.79	4.57	204.89
3	Power Purchase from Traders (ST Open Access)	454.08	4.08	1185.14	635.84	6.68	424.85
4	Power Purchase from RE	465.46	4.33	201.46	305.28	5.18	158.15
5	DSM/Sale of Power	-	-	-	12.79	7.21	9.23
6	**Total Power Purchase**	**2,682.83**	**4.64**	**1,244.97**	**2,586.66**	**5.80**	**1,501.06**

5.5.24 However, the presentation made during the public hearing the total power purchase of Rs. 1501.06 Crore was shown as Rs. 1528.00 Crore.

<u>Additional affidavit dated February 04, 2022 with regard to additional cost of power procured from M/s DIL during FY 2016-17 to FY 2019-20 on the APR/ARR of the petitioner pursuant to truing-up order dated November 22, 2021 of M/s DIL for the MYT period FY 2016-19</u>

Petitioner's Submission

5.5.25 The Petitioner in the additional affidavit submitted that, it has filed the ARR and Tariff Petition No. 1797 of 2021 for the approval of True-Up for the Financial Year 2020-21, Annual Performance Review (APR) for Financial Year 2021-22 and Aggregate Revenue Requirement (ARR) and Tariff for Financial Year 2022-23 on November 26, 2021.

5.5.26 It is submitted that the Commission vide its Order dated November 22, 2021 in Petition No. 1500/2019, has Trued-Up the ARR of M/s DIL for MYT Period FY 2016-19. The Petitioner has filed the instant Affidavit to submit before the Commission, the additional cost of power procured from M/s DIL from FY 2016-17 to FY 2019-20 pursuant to the aforesaid Truing-up Order of M/s DIL for the MYT Period FY 2016-19 on the ARR / APR of the Petitioner.

5.5.27 It is submitted that the Commission vide its Orders dated January 15, 2016 read with April 20, 2016 in Petition No. 971/2014 **("PPA Approval Orders")** approved the PPA between the Petitioner and M/s DIL. After the approval the Petitioner started receiving the supply of 34 MW of power in terms of the PPA with effect from November 18, 2016 and the supply of the remaining 136 MW of power commenced with effect from March 29, 2017. Thereafter, M/s DIL filed a Petition no. 1235/2017 on September 06, 2017 for approval of ARR & Multi Year Tariff ("MYT") for 2016-17 to FY 2018-19 in respect of which the Commission issued Tariff Order on February 05, 2019 ("MYT Tariff Order"). The relevant para of the aforesaid 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:

Table-2: 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***

…………

4.2.13 Further, with regard to approval of energy charge, it is observed that the 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. Thus, the energy charges as per the levelized tariff approved in the PPA, energy charges claimed by the Petitioner and energy charges as approved in this Order by the Commission is given in Table below:

Table-3: Comparison of Energy charges as considered order for approval of PPA vs claimed by the Petitioner (Rs./kWh)

Particulars	***As considered in approval of PPA***	***As claimed in the MYT Petition***	***Revised submission as per capital cost as on Cut off date***	***Energy Charges approved by the Commission***
FY 2016-17	**1.65**	*2.177*	*1.65*	**1.65**
FY 2017-18	**1.72**	*2.177*	*1.72*	**1.72**
FY 2018-19	**1.80**	*2.177*	*1.80*	**1.80**
Levelized Fixed Tariff (25 years)	**2.21**	**2.34**	**2.21**	**2.21**

Note: ***The escalation rate of CERC has been considered as applicable till 31.03.2014, which is subject to true up.***

4.2.14 ***The tariff approved above shall be subject to true up provisions based on the Tariff Regulations 2014. The Petitioner shall 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 Commission* ***while truing up.*** ***……….***

5. IMPLEMENTATION OF ORDER

5.1 This order shall be reckoned to have come into effect from respective 01st day of each year of the for 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

5.5.28 The Petitioner further submitted that it has been claiming the cost of power being procured from M/s DIL based on the bills raised and submission made by it from time to time. However, the Commission has been approving such cost provisionally, based on the Fixed Charges and Energy Charges approved by the Commission in M/s DIL's MYT Tariff Order dated February 05, 2019, subject to truing up of M/s DIL's ARR for the respective years. The Fixed Charges and Energy Charges approved by the Commission in M/s DIL's MYT Tariff Order dated February 05, 2019 have been tabulated below:

Year	Approved Fixed charges (in Rs/unit)	Approved Energy Charges (in Rs/unit)
FY 2016-17	2.05	1.65
FY 2017-18	1.99	1.72
FY 2018-19	1.90	1.80

5.5.29 The Petitioner submitted that the energy charge was approved considering escalation rate of CERC as applicable till March 31, 2014 which will be subject to True up of DIL for the relevant period.

Tariff Order dated September 03, 2019 for approval of ARR for FY 2019-20 and Truing-Up ARR for FY 2017-18:

a. True-up of ARR for FY 2017-18

Quote

> *3.6.14 The Commission vide mail dated June 22, 2019 directed the Petitioner to submit an Affidavit for compliance of Commission's Order dated 05.02.2019 in making payment to DIL towards supply of power. The Petitioner vide mail dated July 12, 2019 submitted the same. Further, for approval of procurement of additional coal DIL has filed Petition 1318/1319 of 2018 in case of shortfall in FSA grade coal in FY 2017-18 and FY 2018-19. Therefore, the Commission for the purpose of True- Up of FY 2017-18 has considered the rates as submitted by the Petitioner. The impact of additional coal on energy charge rate shall be dealt with after the True up of ARR of DIL for respective year is done.*

Unquote

b. ARR FY 2019-20

Quote

> *5.5.5 The Commission in MYT Order dated November 30, 2017 approved long term power from DIL for FY 2019-20 at Rs 4.12/kWh. Further **the Commission vide Order dated February 05, 2019 disposed of MYT Petition no. 1235/2017 in the matter of determination of Tariff for DIL for FY 2016-17 to FY 2018-19 has approved provisional tariff wherein the fixed charges are approved as Rs 1.90/kwh and Energy charges are fixed as Rs 1.80/kWh for FY 2018-19**…*
>
> *5.5.8 Since, there is no further Order in this regard, **the Commission finds it appropriate to provisionally consider the rates of fixed and energy charges as stipulated by the Commission in the aforesaid Order, which will be subject to the Truing up of ARR of DIL for the respective year**.*

Unquote

5.5.30 In view of the above, the Petitioner submitted that the Commission vide Tariff Order dated September 03, 2019 approved power purchase cost on provisional basis in respect of M/s DIL's power at fixed charges and energy charges as approved in its MYT Tariff Order February 05, 2019 and emphasized that since there is no further order hence it is appropriate to provisionally consider the above stated rates which will be subject to the Truing-Up of M/s DIL's ARR for the respective years.

5.5.31 The Petitioner submitted that the Commission in the Petitioner's Tariff Order dated 04.12.2020 i.e. ARR for FY 2020-21, APR for FY 2019-20 and Truing-up of FY 2018-19 stated as follows:

a. Trued-up ARR for FY 2018-19

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

b. ARR for FY 2020-21

Quote

5.4.9 The Commission in MYT Order dated November 30, 2017 approved long term power from DIL for FY 2019-20 at Rs 4.12/kWh. ***Further, the Commission vide Order dated February 05, 2019 disposed of MYT Petition No. 1235 of 2017 in the matter of determination of Tariff for DIL for FY 2016-17 to FY 2018-19, and approved provisional tariff wherein the fixed charges are approved as Rs 1.90/ kWh and Energy Charges are fixed as Rs 1.80/kWh for FY 2018-19****…*

5.4.14 Since, there is no further Order in this regard, ***the Commission finds it appropriate to provisionally consider the rates of fixed and energy charges as***

stipulated by the Commission in the aforesaid Order for FY 2018-19, which will be subject to the Truing up of DIL for the respective year.

Unquote

c. Determination of Revenue Gap/ Surplus

Quote

8.1.17 …..

The Commission has computed the overall (surplus) of Rs. 407.13 Crore for FY 2020-21 taking into consideration True Up of FY 201819 and APR of FY 2019-20. However, ***the impact of M/s DIL filed below pending Petitions before Hon'ble Commission has not considered in this****;*

- *Petition No. 1318 & 1319 of 2018 for Additional Coal Charges (final Order has been issued on 19.3.2020 for FY 2017-18 & FY 2018-19). Petition No. 1438 of 2018 for FY 2019-20 (proceedings are still going on).*
- *MYT Petition of DIL for* ***True-Up of FY 2016-17 to FY 2018-19 Petition No. 1500 of 2019 (proceedings are still going on).***
- *MYT Petition of DIL for ARR of FY 2019-20 to FY 2023-24 Petition No. 1531 of 2019 (proceedings are still going on).*
- *Petition No. 1440 of 2019 in the matter of Petition on account of occurrence of 'Change in Law' events as per Article 13.1.1. of the Power Purchase Agreement (PPA) dated 26.9.2014 between Noida Power Company Limited and Dhariwal Infrastructure Limited. The same was disposed of vide Order dated 14.5.2020.*

Further, the Total Impact of DIL Petitions and upcoming Orders, has been given below:

Particulars	***Impact computed (Rs. Crore)***	***Impact considered provisionally in this Order (Rs. Crore)***
Impact of True-up of FY 2016-17 to FY 2018-19 for DIL	*129.10*	*129.10*

Impact of MYT Order of DIL for FY 2019-20 and FY 2020-21	*210.39*	*129.54*
Total Impact of Orders of DIL (provisionally considered)	***339.49***	***258.64***

8.1.18 Hence, the net revenue Gap/(surplus) approved for FY 2020-21 is as under:

Particulars	***Impact computed (Rs. Crore)***
Revenue Gap / (Surplus) approved for FY 2020-21	*(407.13)*
Impact of Orders of DIL (provisionally considered)	*258.64*
Net Revenue Gap / (Surplus) approved for FY 2020-21	***(148.50)***

…….

Unquote

5.5.32 The Petitioner further submitted that the Commission has continued with provisional approval of power purchase cost of M/s DIL at Rs. 3.70/kWh, Rs. 3.71/kWh and Rs. 3.70/kWh for FY 2016-17, FY 2017-18 and FY 2018-19, respectively stating that the same shall be subject to the Truing up of M/s DIL's ARR for the respective years.

5.5.33 Thereafter, the Commission in the Tariff Order dated 26.08.2021 i.e. ARR for FY 2021-22, APR for FY 2020-21 and Truing-up of FY 2019-20 stated as follows: Tariff Order dated 26.08.2021 i.e. ARR for FY 2021-22, APR for FY 2020-21 and Truing-up of FY 2019-20 stated as follows:

a. <u>True-up for FY 2019-20</u>

Quote

4.6.54 ***The Commission for the True Up for FY 2019-20 has not considered the rates (fixed & energy charges) claimed by the Petitioner.*** *The Commission has considered the same approach it considered while truing up of FY 2018-19.* ***Since the True-Up of DIL for FY 2019-20 has not yet been finalized, the fixed and energy charges of Rs.1.90/kWh and Rs. 1.80/kWh respectively at UP periphery as approved in Order dated February 05, 2019 in Petition No. 1235 of 2017 has been considered for FY 201920 in this Order. Once the True-Up of DIL is approved by the Commission, the impact***

of True-Up of DIL for the respective year shall be considered and allowed to NPCL in the future years ARR/Tariff Order, as and when it happens.

Unquote

b. **ARR for FY 2021-22**

6.4.32 The Commission vide Order dated February 05, 2019 in the matter of determination of Tariff for DIL for FY 2016-17 to FY 2018-19 in MYT Petition No. 1235 of 2017, approved provisional tariff wherein the fixed charges are approved as Rs 1.90/ kWh and Energy Charges are fixed as Rs 1.80/kWh for FY 2018-19…

"6.4.37 ***Since, there is no further Order in this regard, the Commission finds it appropriate to provisionally consider the rates of fixed and energy charges as stipulated by the Commission in the aforesaid Order for FY 2018-19, which will be subject to the Truing up of DIL for the respective year. Once the True-Up of DIL is approved by the Commission, the impact of True-Up of DIL for the respective year shall be considered and allowed to NPCL in the future years ARR/Tariff Order, as and when it happens."***

c. **Determination of Revenue Gap/ Surplus:**

Quote

9.1.17 ……..

The Commission has computed the overall (surplus) of Rs. 1176.81 Crore for FY 2021-22 taking into consideration True Up of FY 201920 and APR of FY 2020-21. However, ***the impact of M/s DIL filed below pending Petitions before Hon'ble Commission has not considered in this;***

- ***MYT Petition of DIL for True-Up of FY 2016-17 to FY 2018-19 Petition No. 1500 of 2019 (proceedings are still going on).***
- *MYT Petition of DIL for ARR of FY 2019-20 to FY 2023-24 Petition No. 1531 of 2019 (proceedings are still going on).*

Further, the Total Impact of DIL Petitions and upcoming Orders, has been given below;

Particulars	***Impact computed (Rs. Crore)***
Impact of True-up of FY 2016-17 to FY 2018-19 for DIL	*129.10*
Impact of MYT Order of DIL for FY 2019-20 and FY 2020-21	*302.81*
Impact of change in Law/additional charges	*7.23*
Total Impact of Orders of DIL (provisionally considered)	***439.14***

9.1.17 Hence, the net revenue Gap/(surplus) approved for FY 202122 is as under:

Particulars	***Impact computed (Rs. Crore)***
Revenue Gap / (Surplus) approved for FY 2021-22	*(1176.81)*
Impact of Orders of DIL (provisionally considered)	*439.14*
Net Revenue Gap / (Surplus) approved for FY 2021-22	***(737.67)***

Unquote

5.5.34 The Petitioner submitted that the Commission all along approved power purchase cost on a provisional basis of M/s DIL at Rs. 3.70/kWh, Rs. 3.71/kWh and Rs. 3.70/kWh for FY 2016-17, FY 2017-18 and FY 2018-19, respectively stating that the same shall be subject to the Truing up of M/s DIL's ARR for the respective years.

5.5.35 The Petitioner further submitted that the Commission vide DIL Truing up Order dated 22.11.2021 approved Truing-Up Petition of M/s DIL for MYT Period 2016-19 as under:

Quote

………………

2.6 Recovery of Revenue Gap for the tariff period FY 2016-19

2.6.1 DIL has submitted that during the tariff period FY 2016-19, DIL has received a total sum of Rs. 972.52 Crores from NPCL by way of Monthly Billing. The trued-up Annual Revenue Requirement allowed to DIL under this order stands at Rs. 1030.31 Crores for FY 2016-19, after excluding claims due to procurement and use of Additional Coal and Change in Law events. Thus, the net Revenue Gap for the tariff period FY 2016-19 excluding the applicable carrying cost works out to be Rs. 57.78 Crores in the following manner:

TABLE 24: REVENUE GAP / (SURPLUS) (EXCLUDING APPLICABLE CARRYING COST) – FY

2016-19

₹

Crores Summary of Revenue Gap / (Surplus) for supply to NPCL for FY 2016-19 (excluding applicable Carrying Cost) – Unit 2

Particulars	***FY 201617***	***FY 201718***	***FY 201819***	***Total***
Trued-up Annual Revenue Requirement (excluding claims due to procurement & use of Additional Coal and Change in Law events) (A)	*38.13*	*489.23*	*502.95*	*1030.31*
Revenue recovered for the Tariff Period FY 2016-19 (B)*				*972.52*
Balance Receivables from NPCL (C) = (A) – (B)				*57.78*

Note: *Revenue recovered from NPCL for the Tariff Period FY 2016-19 before adjusting for rebate wherever applicable*

DIL has claimed its entitlement to recover this balance amount of Rs. 57.78 Crores from NPCL along with carrying cost, which works out to Rs. 20.53 Crs as on 30.11.2020.

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 of the UPERC Regulations, 2014.……………………………

Summary of Decision (s) of the Commission

……………….

(i) ***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***

…………………

Unquote

5.5.36 The Petitioner submitted that the Commission, has approved power purchase cost in above Tariff Orders of Petitioner for supply by DIL at Rs. 3.70/kWh, Rs. 3.71/kWh and Rs. 3.70/kWh for FY 2016-17, FY 2017-18 and FY 2018-19, respectively stating that the same shall be subject to the Truing up of M/s DIL’s ARR for the respective years and did not consider the actual cost claimed by the Petitioner as per the bills raised by M/s DIL.

5.5.37 Whereas, the Commission in Table – 23 in Para 2.5.1 read with Para 3(i) of M/s DIL’s Truing-up Order dated 22.11.2021 has ascertained its Trued-Up ARR for FY 2016-19 as Rs. 1023.66 Crore.

5.5.38 Accordingly, the Petitioner has computed the additional cost of power from M/s

DIL pursuant to its Truing-Up Order dated November 22, 2021 and requested the Commission to kindly allow the same while approving the APR for FY 2021-22:

TABLE 5-13: ADDITIONAL COST OF POWER FROM M/S DIL PURSUANT TO ITS TRUING-UP ORDER DATED 22.11.2021 FOR FY 2020-21

Particulars	Ref. No	FY 2016-17	FY 2017-18	FY 2018-19	Total
Cost of Power purchased from M/s DIL Trued-up in NPCL's Tariff Orders on provisional basis	a	37.11	447.36	416.74	901.21
Cost of Power Purchased from M/s DIL Trued-up in M/s DIL’s Truing-up Order dt. 22.11.21	b	37.95	486.64	499.07	1,023.66
Additional Cost pursuant to DIL’s Truing-up Order dt. 22.11.21	**c=b-a**	**0.84**	**39.28**	**82.33**	**122.45**
Carrying Cost for FY 2016-17 @ 14.99%	**d**	0.06	-	-	0.06
Carrying Cost for FY 2017-18 @ 14.57%	**e**	0.12	2.86	-	2.98
Carrying Cost for FY 2018-19 @ 14.57%	**f**	0.12	5.72	6.00	11.84
Carrying Cost for FY 2019-20 @ 14.46%	**g**	0.12	5.68	11.90	17.70
Carrying Cost for FY 2020-21 @ 9.57%	**h**	0.08	3.76	7.88	11.72
Carrying Cost for FY 2021-22 @ 9.50%	**i**	0.08	3.73	7.82	11.63
Total Carrying Cost	**j= ∑ (d to i)**	**0.59**	**21.75**	**33.66**	**55.94**
Other charges approved in DIL’s Truing-up Orde {Ref.· dt. 22.11.21: Para 3.0 (e), (j) & (k) @ Page 69-71}					
(i) Carrying cost on Additional Coal & Change-in-Law	**k**				**22.63**
(ii) Additional O&M	**l**				**2.72**
Total Additional Cost pursuant to Truing Up Order dated 22.11.2021	**n=c+j+k+l**				**203.73**

5.5.39 The Petitioner submitted that, the Commission in the various Tariff Orders of the Petitioner has cumulatively approved the Power Purchase Cost from M/s DIL as Rs. 901.21 Crore for FY 2016-19 on provisional basis. Further, the Commission in various Tariff Orders of the Petitioner has stated that the effect of Truing-up of M/s DIL shall be considered as and when it is finalized. The Commission in DIL’s Truing-up Order dated November 22, 2021 has determined the Trued-Up ARR for FY 2016-19 as Rs. 1023.66 Crore.

5.5.40 The Petitioner further submitted that it has claimed power purchase cost of M/s

DIL's Power for FY 2019-20 amounting to Rs. 522.47 Crore which is based on the bills received from M/s DIL, however, the Commission in the Petitioner's Tariff Order dated August 26, 2021 has approved the same amounting to Rs. 401.67 Crore. In view of M/s DIL's Truing-up Order dated November 22, 2021, the Petitioner requested the Commission to allow the additional cost of power from M/s DIL including carrying cost for FY 2019-20 while approving the APR for FY 2021-22 as detailed below:

TABLE 5-14: ADDITIONAL COST OF POWER FROM M/S DIL INCLUDING CARRYING COST FOR FY 2019-20

Particulars		Ref. No	FY 2019-20
Power purchase cost of DIL Trued-up in NPCL's Tariff Orders on provisional basis		a	401.67
DIL Power purchase cost as Billed and Claimed by NPCL		b	522.47
Additional Cost		**c=b-a**	**120.80**
Carrying Cost for FY 2019-20 @	14.46%	**d**	8.73
Carrying Cost for FY 2020-21 @	9.57%	**e**	11.56
Carrying Cost for FY 2021-22 @	9.50%	**f**	11.48
Total Carrying Cost		**g=∑ (d to f)**	**31.77**
Total Additional Cost including Carrying Cost		**h=c+g**	**152.57**

5.5.41 Therefore, as per the directives of the Commission the Petitioner has claimed the Additional Cost of power from M/s DIL along with carrying cost thereon and requested the Commission to approve the same while determining the APR of the Petitioner for FY 2021-22.

Commission's Analysis

5.5.42 The Commission observed that the Petitioner has proposed a purchase of 12.79 MU at Rs 9.23 Crore in Deviation Settlement Mechanism (DSM). The Commission vide deficiency dated December 31, 2021 directed the Petitioner to provide justification for such high-power purchase cost and provide the break-up of the proposed purchase and sale along with corresponding rates for the year.

5.5.43 In response to the Commission's query, the Petitioner submitted that due to diversity of load / consumption the power contracted and scheduled in advance becomes surplus/short than the instant demand and due to the above mismatch, the respective Central / State Load Dispatch Centre computes and levies DSM charges from respective Generating / Distribution Companies. The newly notified DSM Regulations has made the UI rules more stringent and a distribution Licensee has to match its schedule within 6-time blocks otherwise it will have to bear heavy penalties. Therefore, keeping in view the uncertain and volatile changes in demand and supply position amidst coal shortage during FY 2021-22 till preparation of the APR Petition, the Petitioner has estimated net drawl of 12.79 MU through DSM at an estimated net cost of Rs. 9.23 Crore subject to True-Up in subsequent period.

5.5.44 The Petitioner further submitted that the above drawl of power is after adjustment of under-drawl / over-drawl in various Time-blocks over the days and thus, the cost and quantum of power is not comparable.

5.5.45 Further, the Petitioner has claimed vide Additional Affidavit dated February 04, 2022 in the APR of FY 2021-22 the impact of true-up of M/s Dhariwal Infrastructure Limited in the Petition No. 1500 of 2021 vide order dated 22.11.2021 for the MYT period of FY 2016-19 of Rs. 203.73 Crore & for the FY 2019-20 of Rs. 152.57 Crore.

5.5.46 With regard to the impact of above true up Order for the period FY 2016-19, the Commission has observed that there will be considerable impact on the Long Term Power Purchase cost of the petitioner, as shown in the table below. Therefore, the Commission will carry out the detailed analysis of the same during the True Up of FY 2021-22, subject to the submissions made by the petitioner & prudence check by the Commission:

TABLE 5-15: ADDITIONAL POWER PURCHASE COST OF DIL CLAIMED VIDE ADDITIONAL AFFIDAVIT DATED 04.02.2022

Particulars		FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Total
Power Purchase Cost allowed as per True-up Orders	(A)	37.11	447.36	416.74	401.67		-	-	-

Power Purchase Cost as per Additional Affidavit dated 04.02.2022	(B)	37.95	486.64	499.07	522.47	-	-	-	-
Difference	(C = B-A)	0.84	39.28	82.33	120.80	-	-	-	243.25
Carrying Cost on (C) as per Additional Affidavit dated 04.02.2022	-	0.59	21.75	33.66	31.77	-	-	-	87.77
Carrying Cost on Additional Coal & Change in Law as per Additional Affidavit dated 04.02.2022	-	-	-	-	-	-	-	-	22.63
Additional O & M as per Additional Affidavit dated 04.02.2022	-	-	-	-	-	-	-	-	2.72
Total									356.37

5.5.47 The Petitioner has also claimed the impact of the above True-Up Order on the Long Term Power Purchase cost for the FY 2019-20, however, the above true-up Order was for the period from FY 2016-19 not for FY 2019-20. Further, the DIL's MYT Petition for the Period FY 2019-24 is also ongoing before the Commission. Therefore, the Commission will take up the impact of DIL's True-Up Order on the Long Term Power Purchase cost for the FY 2019-20 and further years, once the True-Up of DIL for the period FY 2019-20 & further years is finalised.

5.5.48 Further, the Commission will carry out the detailed analysis of Power purchase expenses for FY 2021-22 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.:

$$EMP_N = EMP_{N-1} X (1+CPI\ inflation)$$

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 finance charges are being incurred on various facilities availed by the Petitioner with respect to Loans, both, Fund based and non-Fund based. These facilities are linked with the volume of business viz. power purchase, debtors, capital expenditure, collection volumes in respect of digital transaction charges or Cash Management Services (CMS) etc. are not dependent on inflation rates as has been proposed to be increased in the MYT Regulations, 2019.

5.6.4 Considering the above, the Commission has been approving such expenses as per audited annual accounts from time to time in its various tariff orders. Some of the charges like collection charges on digital modes of collection are being incurred in pursuance to the directions of the Commission e.g., no charges from consumers making payment through net-banking of an amount upto Rs. 4,000/-.

5.6.5 Thus, the above expenses are completely different and not comparable with the expenses which forms part of the A&G expenses and hence the Petitioner requested the Commission to not club it with the finance charges with A&G expenses.

5.6.6 The Petitioner submitted that the delayed payment surcharge (DPS) accrues when a consumer defaults in payment of bills as per due date being generally 15 days from the date of billing which happens to be 2-7 days after the meter reading date which is generally taken after 30 /31 days interval. Hence, the total number of days after which the DPS accrues is almost 55 days which is more than the number of days for which a distribution licensee is compensated by interest on working capital as per MYT Regulations, 2019 i.e., 45 days. Hence, DPS belongs to the period beyond normative period and for 45 days for which interest on working capital is not provided in the MYT Regulations, 2019. Thus, to appropriately compensate for the cost incurred for financing that deferred payment beyond the normative period, the Commission has been approving, in its various Tariff Orders issued from time to time since FY 2009-10 onwards, the cost of borrowing of such deferred receivables in the form of interest cost at relevant State Bank of India -Prime Lendiing Rate (SBI-PLR). Consequently, it may be concluded that the financing cost of DPS is nothing but interest on the money, equity or debt as the case may be arranged/provided by the Discom to fund delayed payment of electricity dues by the Consumers and has no similarity with nature of other A&G expenses.

5.6.7 The Petitioner requested the Commission not to include the above finance charges and financing cost of DPS in determination of base year normative O&M expenses and the same to be allowed separately. Accordingly, the Petitioner has not considered the above-mentioned Finance Charges and Financing Cost of DPS in the computation of average A&G expenses for 5 years and claimed it separately.

5.6.8 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.

5.6.9 The Petitioner submitted that since, the Commission had approved the above-referred expenses incurred by the Petitioner due to change in law / direction of the Commission after prudence check, 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 2020-21 vide its Tariff Order dated December 04, 2020, inadvertently had not considered the above-mentioned additional O&M expenses approved in True-Up of preceding years.

5.6.10 The Petitioner submitted that it has considered the above additional O&M expenses on compliance to directives of the Commission, impact of Service Tax and impact of GST in determination of normative O&M expenses for Base Year.

5.6.11 The Petitioner further submitted that the Commission vide its Tariff Orders dated December 04, 2020 and August 26, 2021 has not approved the Petitioner's claim towards impact of GST for FY 2018-19 and FY 2019-20 and ruled as under: -

a) The regulation does not provide for escalation of norms nor adjustment of one-time expenses;

b) Since R&M expenses are allowed as a percentage of GFA which includes GST, hence, the same may not be provided separately;

c) The inflation indexes include the impact of GST.

5.6.12 In this regard, the Petitioner submitted that Regulation 25 (e) & (g) of the MYT Regulations, 2014 specifies as under:

> *"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.*
>
> *………………….*
>
> *(g) The norms shall be determined at constant prices of base year and escalation on account of inflation shall be over and above the baseline."*

5.6.13 The Petitioner submitted that these provisions are general provisions and are applicable to entire O&M expenses i.e., employee cost, R&M expenses and A&M expenses. In-fact, in accordance with the above Regulations, the Commission had approved the impact of GST in its earlier orders viz. Order dated January 22, 2019 and Order dated September 03, 2019.

5.6.14 The Petitioner further submitted that, with respect to the finding of the Commission that GFA already includes GST impact, the R&M expenses are allowed as a percentage of GFA and since, GST has come into effect only from July 01,2017, thus, only additions post the aforesaid date can be said to include GST in the cost which is less than 10% of the total GFA as at March 31, 2020 being considered for the purpose of computation of normative R & M expenses. In the subsequent years i.e., from FY 2020-21 onwards, R&M expenses are not computed based on GFA, hence, the aforesaid contention is not applicable.

5.6.15 With regards to the finding that the indexes include impact of the Taxes, the Petitioner submitted that the Press Release dated May 12, 2017 issued by Ministry of Commerce & Industry with respect to inflation indices of WPI (being used for the purpose of R&M expenses and A&G expenses) clearly states that it does not include the impact of taxes.

5.6.16 The Petitioner requested the Commission to consider its claim in accordance with the provisions of the MYT Regulations, 2019 which recognize Change in law/ Taxes & Duties as Uncontrollable Factor and Commission’s Orders dated January 22, 2019 & September 03, 2019 wherein the Petitioner was allowed the differential impact of GST at 5.88% of the expenses.

5.6.17 In view of the above, the Petitioner has considered the impact of GST for FY 2018-19 and FY 2019-20 in the computation of Average O&M expenses for Base Year. Based on above, the average of 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 have been considered for computing the O&M expenses for FY 2022-23. **Employee expenses: -**

5.6.18 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

5.6.19 Based on above Regulation, the normative employee expenses for FY 2021-22 works out as shown in following Table: -

TABLE 5-16: EMPLOYEE EXPENSES SUBMITTED BY THE PETITIONER FOR FY 2021-22

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**
	a	**b**	**c=a x (1+b)**	**D**	**e=c x (1+d)**
Normative Emp. Expense	29.58	5.35%	31.16	6.00%	33.03

A&G expenses:

5.6.20 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

5.6.21 Accordingly, considering the norms as mentioned above, the normative A&G expenses for FY 2021-22 works out as shown in following Table:

TABLE 5-17: A&G EXPENSES SUBMITTED BY THE PETITIONER FOR FY 2021-22 (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	**B**	**c=a x (1+b)**	**d**	**e=c x (1+d)**
Normative A&G Expense	13.25	2.96%	13.65	2.42%	13.98

R&M expense:

5.6.22 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

5.6.23 Accordingly, considering the norms as mentioned above, the normative R&M expenses for FY 2021-22 works out as shown in following Table:

TABLE 5-18: A&G EXPENSES SUBMITTED BY THE PETITIONER FOR FY 2021-22 (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**
	A	**b**	**c=a x (1+b)**	**D**	**e=c x (1+d)**
Normative R&M Expense	44.51	2.96%	45.83	2.42%	46.94

5.6.24 The Petitioner submitted the estimated O&M expenses for FY 2021-22 in Table below along-with amount approved by the Commission in Tariff Order dated August 26, 2021.

TABLE 5-19: SUMMARY OF O&M EXPENSES SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Sl. No.	Particulars	Tariff Order for FY 2021-22 dated 26.08.2021	Normative	Claimed in APR
1	Repair & Maintenance expenses	39.16	46.94	59.79
2	Employees expenses	31.25	33.03	68.40
3	Administrative & General expenses	14.51	13.98	19.44
5	Total O&M expenses	84.93	93.95	147.63
6	Employee cost capitalised	(10.00)	(12.00)	(12.00)
7	Net O&M expenses	74.93	81.95	135.63

5.6.25 The Petitioner submitted that from the above table it can be seen that that the O&M expenses as determined in accordance with Regulation-45 of MYT Regulations, 2019 are not reflective of the actual expenses in accordance with the business parameters as there is significant gap between the estimated O&M expenses and that approved by the Commission on normative basis in accordance with the Regulation-45 of MYT Regulations, 2019.

5.6.26 The Petitioner submitted that since the O&M expenses determined on normative basis in accordance with the Regulations-45 of MYT Regulations, 2019, are insufficient in comparison to estimated expenses, the Commission may consider O&M expenses for FY 2021-22 as estimated by it which are commensurate with its business operations and necessity to run operations efficiently owing to following factors which are beyond the control of the Petitioner: -

Increase in Minimum wages:

5.6.27 The Petitioner has submitted that all the 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 are as provided in Table:

TABLE 5-20: MINIMUM WAGES IN STATE OF U.P. SUBMITTED BY THE PETITIONER

(Rs.Crore)

Class of labour	As on 1st Apr'18	w.e.f. 1st Apr'21	w.e.f. 1st Oct'21	% Increase in C over A
	A	B	C	D
Skilled	9,381.00	11,185.00	11,316.16	20.63%
Semi-skilled	8,375.00	9,985.00	10,102.29	20.62%
Unskilled	7,613.00	9,078.00	9,184.00	20.64%

5.6.28 The Petitioner submitted that the wages applicable from April 01, 2021 is higher by 20-21% as compared to wages prevailing on April 2018 (i.e., mean financial year considered for determination of norms). Thus, the wages applicable for full FY 2021-22 and FY 2022-23 would be significantly higher as compared to the norms.

5.6.29 The Petitioner submitted that its license area is situated in 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-NCR. The following Table shows that minimum wages prevailing during FY 2021-22 in NCT-Delhi are higher by 70%-74% as compared to State of UP:

TABLE 5-21: COMPARISON OF MINIMUM WAGES IN STATE OF U.P. AND NCT-DELHI FOR FY 2021-22 SUBMITTED BY THE PETITIONER

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%

5.6.30 The Petitioner submitted that the minimum wages have a direct and substantial impact on most of the constituents of O&M expenses viz., 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 and the Petitioner has to comply with the same. Therefore, impact of the changes in minimum wages is beyond the control of the Petitioner and cannot be subsumed within normative employee cost.

5.6.31 The Petitioner also submitted that although the MYT Regulations, 2019 provides for escalation of normative Employee cost on the basis of CPI, however, the resultant escalation is significantly lower in comparison to actuals and the increase in minimum wages is not covered in CPI. Hence, the impact of increase in minimum wages do not get compensated through incremental CPI.

Recommendation of Seventh Pay Commission:

5.6.32 The Petitioner submitted that with implementation of the Seventh Pay Commission, the average pay of government employees has increased by more than 25% 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 Petitioner has been facing a challenge to retain requisite workforce and to minimize attrition in the increasingly competitive market with more and more participation of private sector in the utility segment including electricity distribution. Therefore, any increase in emoluments given by the Central Pay Commission, will have a direct bearing on the salary and emoluments of the Petitioner's employees so as to retain and motivate them appropriately.

5.6.33 The Petitioner stated that the Commission has been approving the impact of change in pay scales as recommended and approved by various Pay Commissions 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.

5.6.34 The Petitioner requested the Commission to approve the O&M expenses on actuals considering the significant increase in salaries and minimum wages.

Other Drivers affecting the O&M expenses:

5.6.35 The Petitioner submitted that the Commission, in its various orders, has acknowledged the performance standards of the Petitioner and further in its Order date January 29, 2019, observed that NPCL is the best performing utility in U.P. Having regard to observation of the Commission, the Petitioner has been striving hard to control and optimize its O&M expense primarily keeping the consumers interest in view.

5.6.36 The Petitioner submitted that, as regards to 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 incidences occurring frequently. The administration or police personnel seldom finds time for attending to the complaints of pilferages/manhandling of the equipment's like transformer, cable etc. of the Petitioner. This in turn alleviates the expenditure on frequent breakdown and repair, resulting into more R&M expenses.

5.6.37 The Petitioner submitted that the Model Regulations provides 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 14, 2010 stated as under:

Quote

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.

Unquote

5.6.38 Based on the above, the Commission in its Tariff Order dated October 14, 2010, had directed the Petitioner to conduct a study to benchmark its O&M expenses and accordingly ICRA Management Consultancy Services Private Limited was appointed to conduct the study with prior approval of the Commission. Some of the important observations of their report are given below:

Quote.

Executive Summary- Clause 1.3:

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 5-22: ACTUAL O&M EXPENSES OF NPCL COMPARED WITH BENCHMARKED EXPENSES FOR FY 2011-12 (PAISE PER KWH)

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):
Conclusion

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:

1. More than optimal utilization on the employees especially the breakdown teams

2. Higher dependence on reactive maintenance instead of preventive maintenance approach

3. 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.

Unquote

5.6.39 The Petitioner stated that it is not feasible for the them to sustain the previous low-cost operation for complying with service and safety standards. Therefore, the disallowance of expenses would jeopardize the operational efficiency achieved by the Petitioner over past 27 years. The O&M expenses have to be increased to maintain and improve upon the service standards and prepare itself for growing requirement of the consumers servicing.

5.6.40 The Petitioner submitted that its expenses are duly audited by Statutory Auditors and approved by the Board of Directors of the Petitioner. 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 Petitioner, and therefore, have to be allowed in full.

5.6.41 The Petitioner submitted that O&M expenses of the Licensee are much lower in comparison to other Distribution Utilities of U.P. as well Discoms of other States.

5.6.42 The Petitioner submitted that the benchmarking study conducted by M/s Feedback Infra also confirms that the Petitioner is operating with a very low O&M cost. The Petitioner submitted that all its expenses are 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, though the current O&M cost is already lower, but it will decrease further in per unit terms as the demand increases. At present, despite being competitive in O&M cost, the volume of the Petitioner is much lesser as compared to other State Discoms.

5.6.43 The Petitioner submitted that the O&M expenses approved by the Commission in its Tariff Order dated August 26, 2021, on normative basis in accordance with the Regulations-45 of MYT Regulations, 2019 are insufficient in comparison to that estimated by the Petitioner. Therefore, the Petitioner requested the Commission to approve the O&M expenses for FY 2021-22 as estimated by it owing to various factors like minimum wages, High IT & automation expenses, increase in volumes, consumers numbers, office infrastructure etc.

Capitalization of Employee cost:

5.6.44 The Petitioner submitted that it has estimated to capitalize an amount of Rs. 12.00 Crore out of the total employee cost of Rs. 68.40 Crore estimated to be incurred during FY 2021-22, 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 the software itself and actual employee cost so incurred, is capitalized along with the specific project. It is pertinent to mention 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.

5.6.45 These man-hours and cost are duly verified by the Statutory Auditors of the Petitioner in detail and is approved by the Board of Directors of the Petitioner subsequently.

5.6.46 On the basis of the aforesaid policy, approved and followed consistently over the years, the Petitioner submitted to the Commission to consider the capitalization of employee cost at Rs. 12.00 Crore during FY 2021-22.

5.6.47 The Petitioner requested the Commission to approve the net O&M expenses excluding GST component as Rs. 135.63 Crore for FY 2021-22 subject to truing up.

ADDITIONAL O&M EXPENSES FOR COMPLIANCE OF NEW/AMENDED REGULATION AND DIRECTION:

5.6.48 The Petitioner 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 Petitioner. 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 to all the distribution licensees, their franchisee and the consumers in the State of Uttar Pradesh. The Commission in these Regulations has specified stringent performance parameters 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 issued by Ministry of Power for Central Electricity Authority (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.*
>
> *(ii)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 October 06, 2021 has issued the "The Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021". The said Regulations have defined the times lines for Feeder & DT Metering, Energy Accounting and Process of Energy Audit. The following are the key directions 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 make available on its website 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 make available on its website 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 Petitioner submitted that the Commission vide its Tariff Order dated December 04, 2020 and dated August 26, 2021 directed the Petitioner to ensure 100% feeder metering and DT metering with energy audit.

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 Petitioner. To comply with the aforesaid regulations and directions, the Petitioner 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 letter no. CEA-CH-13-12/4/2021-IT Division dated October 08, 2021, had 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 CCMP 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 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 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 specifically to comply with the mandatory requirements of "Guidelines on Cyber Security for Power Sector" issued by the CEA, the Petitioner 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 Petitioner'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 Anti-Virus, Security Information and Event Management (SIEM), OT Visibility Tool, Security

Operation Centre (SOC), Endpoint Detection and Response (EDR), Mobile Device Management (MDM), etc. to ensure compliance to 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 members like Chief Information Security Officer (CISO), Deputy/Alternate CISO and other requisite 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 Petitioner is required to purchase new hardware, software and tools and also required to recruit additional competent manpower leading to additional O&M expenses.

5.6.49 The Petitioner submitted that Distribution Transformer (DT) and Feeder metering project has been proposed to comply with the directions of the Commission, Ministry of Power and Bureau of Energy Efficiency. 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.

5.6.50 The Petitioner 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.

5.6.51 The Petitioner submitted that, in order to comply with the above new / amended Regulations, the Petitioner is required to recruit additional competent manpower leading to additional expenses on employee expenses, 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.

5.6.52 In this regard, Regulation 25 (e) & (g) of the MYT Regulations, 2014, specifies as under –

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.

(g) The norms shall be determined at constant prices of base year and escalation on account of inflation shall be over and above the baseline.

………………….

Unquote

5.6.53 The Petitioner submitted that the Commission vide its Tariff Order dated July 29, 2021 for the U.P. State DISCOMs allowed additional R&M expenses equivalent to 50% of Normative R&M expenses to comply with SOP regulations. The extract of relevant para is as under:

Quote

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 stime 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.*

Unquote

5.6.54 The Petitioner has considered the impact of such additional O&M expenses @ 10% of the O&M expenditure for the purpose of compliance of the New/amended Regulations and Directions as described above. The Petitioner requested the Commission to approve the same as being allowed to UPPCL's State Discoms also over and above the normative O&M expenses.

Commission's Analysis

5.6.55 The Commission vide Tariff Order dated August 26, 2021 had approved O&M expenses for FY 2021-22. The Commission has observed that the revised net O&M expenses submitted by the Petitioner is higher than that approved by the Commission vide Tariff Order dated August 26, 2021. The Commission also observes that there is a significant difference between the same.

5.6.56 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 2021-22.

5.6.57 The Commission will carry out the detailed analysis of O&M expenses for FY 2021-22 at the time of Truing Up, subject to prudence check by the Commission.

5.7 EXPENSES INCURRED DUE TO CHANGE IN LAW - GST

Petitioner's Submission

5.7.1 The Petitioner submitted that the Central Government has made new Goods & Service Tax (GST) effective from July 01, 2017 which covers almost all goods and service within its ambit. The new GST has stipulated tax rate of 18% and 28% for most of the goods and services as against Service Tax of 15% and VAT of 14.5%. Apart from above it has also brought in new service under Reverse Charge Mechanism which leads to higher indirect tax burden on service users such as the Petitioner.

5.7.2 The Inflation Index i.e., WPI being used for determination of normative R&M expenses and A&G expenses do not include the impact of changes in indirect taxes, hence the Discoms are not compensated for increase in GST when R&M expenses and A&G expenses are determined on normative basis as per MYT Regulations, 2019. Apart from above, it is also pertinent to mention here that R&M expenses are allowed as a percentage of GFA and since, GST has come into being only from July 01, 2017, thus, only additions post the aforesaid date can only be said to include GST in the cost which is not even 10% of the total GFA.

5.7.3 The Petitioner submitted that it got the impact analysis of the GST done from M/s Lakshmi Kumaran & Sridharan, Attorney which summarized and brought forth the impact of GST Act as well as rules, notifications, etc., made thereunder, on the distribution of electricity done by the Petitioner, with emphasis on cost of various expenses incurred by the Petitioner pre and post implementation of GST. This Report provided an insight into the indirect taxation system of the country post GST and contained an analysis of the cost increase / decrease to Petitioner after the implementation of GST. Based on this report, the Commission in its Tariff Order dated September 03, 2019 approved average incremental rate of GST as 5.88% while approving the True-up of ARR for FY 2017-18.

5.7.4 The Petitioner submitted that the Normative O&M expenses for Base Year FY 2019-20 are determined on the basis of CPI and WPI based escalation of O&M expenses for Mid-Year FY 2017-18 when GST was applicable only from 2nd quarter. Therefore, O&M expenses computed in accordance with the Regulation-45 of MYT Regulations, 2019 for FY 2021-22, would be only Rs. 103.53 as against estimated expenditure of Rs. 105.88 (assuming no inflation for simplicity). Thus, out of the Impact of GST of 5.88% being verified and approved by the Commission vide its

Tariff Order dated September 03, 2019, only 3.53% is allowed in the normative O & M expenses.. Since remaining GST Impact of 2.35% is not covered in Normative O&M expenses for FY 2021-22 determined as per Regulation-45 of the MYT Regulations, 2019 and the “Change in Law” is an “Uncontrollable Factor” as defined under Regulation-8 of MYT Regulations, 2019, the Petitioner requested the Commission to approve the claimed amount of Rs. 1.91 Crore under other items of APR for FY 2021-22.

5.7.5 Apart from above, the CBEC vide Circular No. 34/8/2018-GST dated March 01, 2018 has clarified that the services as stated below when provided by Discoms to consumer are taxable.

a) Application fee for releasing connection of electricity
b) Rental Charges against metering equipment
c) Charges for duplicate bill
d) Testing fee for meter/transformer, capacitors etc.
e) Labour charges from customer for shifting of service lines

5.7.6 Consequently, Directorate General of GST Intelligence (DGGSTI), New Delhi issued a summon u/s 70 of CGST Act on May 29, 2018, requesting the Petitioner to produce information on the amounts collected by the Petitioner from July 01, 2017 to April 30, 2018 towards abovementioned five services or any other charges collected from the customers over and above the electricity charges for the period.

5.7.7 The Petitioner submitted that it has filed the detailed reply in response to summon and has also filed a writ petition before Hon'ble Allahabad High Court on July 24, 2018 and challenged above Circular issued by Department of Revenue and summon issued by DGGSTI. Since, the matter before Hon’ble Allahabad High Court is still pending, the Petitioner in the meantime has filed an intervention petition on November 13, 2019, in respect of the same matter already pending before the Hon’ble Supreme Court in the case of Torrent Power Ltd. wherein the Department has filed an appeal against the judgement of Hon’ble Gujrat High Court being given in favour of Torrent Power Ltd.

5.7.8 Further taking abundant precaution and without prejudice to the Petitioner’s rights and contentions with respect to above writ and intervention petitions, the Petitioner has started to levy GST on above services from October, 2018 onwards.

5.7.9 Therefore, depending on the outcome of the above-mentioned writ and intervention petitions, the Petitioner in future may become liable to pay GST on above services in respect of the duration when GST was not levied on such service.

5.7.10 However, pending final adjudication of the matter, the amount payable cannot be ascertained at this stage, therefore, the Petitioner has not claimed the same in this APR Petition and it shall claim so on actual basis at an appropriate time.

Commission's Analysis

5.7.11 The Commission will carry out the detailed analysis of these expenses for FY 2021-22 at the time of Truing-Up of FY 2021-22.

5.8 CAPITAL EXPENDITURE

Petitioner's Submission

5.8.1 The summary of capital expenditure approved by the Commission vide its Tariff Order dated August 26, 2021 and the estimated Capital Expenditure for FY 2021-22 is as under: -

TABLE 5-23: CAPITAL EXPENDITURE FOR FY 2021-22 (RS. CRORE)

Particulars	Ref.	Tariff Order for FY 2021-22 dated 26.08.2021	Claimed in APR
Addition to GFA	A	239.71	290.94
Add: Closing CWIP	B	0.00	9.05
Less: Opening CWIP	C	0.00	(73.46)
Capital Expenditure	**d=a+b-c**	**239.71**	**226.53**
Add: Interest & Salary Capitalisation	E	Included Above	Included Above
Less: Assets Retired	F	(6.65)	(6.58)
Net Capex	**g=d+e-f**	**233.06**	**219.95**
Consumer Contribution	H	112.51	108.00
Capital Expenditure	**i=g-h**	**120.55**	**111.95**

5.8.2 The Petitioner submitted that the Regulation 44.2 of the MYT Regulations, 2019 specifies as under:

> *"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."

5.8.3 Accordingly, the item-wise details of the capital expenditure are given in the Table below: -

TABLE 5-24: CAPITAL EXPENDITURE FOR FY 2021-22 SUBMITTED BY THE PETITIONER (RS. CRORE)

Sl. No.	**Nature of Works**	**Tariff Order for FY 2021-22 dated 26.08.2021**	**Claimed in APR**
1	New Connections, Replacement Stock & Metering	229.71	137.55
2	Construction of Substations, Transformers and Construction 33kV, 11 kV & LT Network		95.34
3	Process System Automation		7.27
4	IT Projects		9.50
5	Civil Works & Office Infrastructure Facility		13.10
6	Tools & Testing Equipment		2.45
7	Vehicles		2.25
8	Demand Side Management		2.00
9	Leasehold Land		9.49
10	**Sub-Total**	**229.71**	**278.94**
11	Interest Capitalisation	Included above	Included above
12	Employee expense Capitalisation	10.00	12.00
13	**Total**	**239.71**	**290.94**

5.8.4 The Petitioner has submitted that the item-wise details of quantity and cost of the aforesaid capex.

5.8.5 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.

5.8.6 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.

5.8.7 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 2021-22 as detailed above, the funding of the aforesaid capital expenditure of Rs. 290.94 Crore is given in the Table below: -

TABLE 5-25: CAPITAL EXPENDITURE FUNDING SUBMITTED BY THE PETITIONER

Particulars	Ref.	Tariff Order for FY 2021-22 dated 26.08.2021	Claimed in APR
Addition to GFA	A	239.71	290.94
Add: Closing CWIP	B	0.00	9.05
Less: Opening CWIP	C	0.00	(73.46)
Capital Expenditure	d=a+b-c	239.71	226.53
Add: Interest & Salary Capitalisation	E	Included Above	Included Above
Less: Assets Retired	F	(6.65)	(6.58)
Net Capex	g=d+e-f	233.06	219.95
Consumer Contribution	H	112.51	108.00
Capex to be financed	i=g-h	120.55	111.95
Debt - 70%	**j=i x 70%**	**84.39**	**78.36**
Equity- 30%	**k=h x 30%**	**36.17**	**33.58**

5.8.8 The Petitioner requested the Commission to approve the above Capital Expenditure plan.

Commission's Analysis

5.8.9 The Commission has observed that the Net Capital expenditure estimated by the

Petitioner for FY 2021-22 is Rs. 290.94 Crore as against Rs. 239.71 Crore approved by the Commission in its Order dated August 26, 2021.

5.8.10 The Commission directed the Licensee to confirm whether it has claimed any Capital expenditure/additional capitalisation for FY 2021-22 for any 132/220 kV assets in the petition. The Petitioner submitted that it has not proposed / claimed any Capital expenditure/additional capitalisation for FY 2021-22 for 132/220 kV assets.

5.8.11 The Commission will carry out the detailed analysis of these expenses for FY 2021-22 at the time of Truing-Up for FY 2021-22.

5.9 INTEREST & FINANCE CHARGE

5.9.1 Interest and Finance Charges covers the following cost elements

- Interest on Long Term Loans
- Interest on Working Capital
- Interest on Security Deposits
- Finance Charges

5.10 INTEREST ON LONG TERM LOANS

Petitioner's Submission

5.10.1 The Petitioner submitted that, in accordance with Regulation 20.2 of the MYT Regulation, 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 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 2020-21 for determination of Interest on Term Loan for FY 2021-22.

5.10.2 Accordingly, considering Capital Expenditures for FY 2018-19 to FY 2020-21 as claimed by the Petitioner and debt equity of 70:30, the opening normative net debt for FY 2021-22 works out to Rs. 550.97 Crore.

5.10.3 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.

5.10.4 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*

5.10.5 The Petitioner submitted that since it does 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 loan for FY 2021-22.

5.10.6 Accordingly, the total normative interest on Term Loan comes at Rs. 55.52 Crore for APR of FY 2021-22, is submitted for the approval of the Commission.

5.10.7 The summary of interest on Term Loan (normative) for FY 2021-22 is given in the Table below: -

TABLE 5-26: COMPUTATION OF INTEREST ON TERM LOAN SUBMITTED BY THE PETITIONER (RS. CRORE)

Sl. No.	Loan Computation	Ref.	Tariff Order for FY 2021-22 dated 26.08.2021	Claimed in APR
1	**Net Normative loan - Opening**	**a**	**438.43**	**550.97**
2	Increase/Decrease due to ACE during the Year	b	84.39	78.36
3	Repayments of Normative Loan during the year	c	46.12	60.13
4	**Net Normative loan - Closing**	**d=a+b-c**	**476.70**	**569.20**
5	Average Normative Loan	e=(a+d)/2	457.57	560.09
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**	**55.52**

Commission's Analysis

5.10.8 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 2021-22 dated August 26, 2021.

5.10.9 Further analysis of the Interest on Long Term Loans for FY 2021-22 would be carried out during Truing-Up of FY 2021-22.

5.11 INTEREST ON WORKING CAPITAL

Petitioner's Submission

5.11.1 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

5.11.2 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.

5.11.3 The Commission in its Tariff Order dated August 26, 2021 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.

5.11.4 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.

5.11.5 Accordingly, the computation of interest on working capital for FY 2021-22 is shown the Table below: -

TABLE 5-27: INTEREST ON WORKING CAPITAL SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Particulars	Ref	Tariff Order for FY 2021-22 dated 26.08.2021	Claimed in APR
O&M expenses for 1 month	a	6.24	12.24
One-and-a-half-month equivalent of expected revenue from distribution tariff	b	256.13	255.06
Maintenance spares @ 40% of the R&M Expense for 2 Months	c	2.61	4.30
Gross Total	**d=a+b+c**	**264.98**	**271.61**
Security Deposits from Consumers			
Opening Balance	e	270.11	274.48
Received during the year (Net of	f	14.41	14.47

Particulars	**Ref**	**Tariff Order for FY 2021-22 dated 26.08.2021**	**Claimed in APR**
Refunds)			
Closing Balance	g=e+f	284.53	288.96
Average Security Deposit	**h=(e+g)/2**	**277.32**	**281.72**
Security Deposit with UPPCL	i	11.28	11.28
Net Security Deposits from Consumers	**j=h-i**	**266.04**	**270.44**
Net Working Capital	**k=d-j**	**-**	**1.17**
Rate of Interest for Working Capital (SBI - 1Year MCLR + 2.50%)	L	10.65%	9.50%
Interest on Total Working Capital	**m=k*l**	**-**	**0.11**

5.11.6 The Petitioner submitted that as per the practice followed by the Commission in its various Tariff Orders, latest being 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.

5.11.7 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

5.11.8 The analysis of the Interest on Working Capital for FY 2021-22 would be carried out at the time of Truing-Up of FY 2021-22.

5.12 INTEREST ON CONSUMER SECURITY DEPOSIT

Petitioner's Submission

5.12.1 Regulation 25.2 (c) of the MYT Regulation, 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 August 26, 2021 has approved the Interest on Security Deposit @ 4.25% p.a. Accordingly, based on the RBI's Bank Rate prevailing on the April 01, 2021 i.e., 4.25% p.a. as also approved by the Commission, the interest payable on security deposit from consumers during FY 2021-22 is given below: -

TABLE 5-28: INTEREST ON SECURITY DEPOSIT SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Particulars	Ref.	Tariff Order for FY 2021-22 dated 26.08.2021	Claimed in APR
Opening Balance of Security	a	270.11	274.48
Addition During the year net of	b	14.41	14.47
Closing Balance of Security Deposit	c=a+b	284.53	288.96
Average Balance of Security	**d=(a+c)/2**	**277.32**	**281.72**
Rate of Interest	e	4.25%	4.25%
Interest payable on Security	**f=dxe**	**11.79**	**11.97**

Commission's Analysis

5.12.2 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 2021-22.

5.12.3 Further analysis of the Interest on Security Deposit for FY 2021-22 would be carried out during True-Up of FY 2021-22.

5.13 FINANCE CHARGES

Petitioner's Submission

5.13.1 The Petitioner submitted that it has to incur various finance charges for availing of financial products and services for the purpose of meeting its financial and other business needs. These charges are genuine business expenditure and has been explained in details as under:

I. **Loan Processing Charges:** The Petitioner submitted that it has negotiated a number of facilities in preceding years and also estimated the requirement for ensuing year. During, FY 2021-22, it submitted that it has incurred expenses 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 Petitioner 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 Petitioner submitted that it has 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. Commission has also vide its order dated May 29, 2015, 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:** The Petitioner submitted that 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 Licensee 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 .

Quote

> *…i. In accordance with Section 28 (3) (a) the NRLDC & RLDC shall dispatch 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.

Unquote

5.13.2 The Petitioner submitted that it will have to incur additional expenses to issue Letter of Credit in favor of Generating Companies.

5.13.3 Therefore, the Petitioner requested the Commission to approve the Finance Charges for FY 2021-22 as summarized in the Table below: -

TABLE 5-29: FINANCE CHARGES SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Sl. No.	Financing Activity	Tariff Order for FY 2021-22 dated 26.08.2021	Claimed in APR
1	Processing Fee	Included in O&M Expenses	0.31
2	Credit Rating Charges		0.05
3	Collection Facilitation Charges		1.20
4	SBLC & Other Finance Charges		0.45
	Total		**2.01**

Commission's Analysis

5.13.4 The analysis of Finance charges for FY 2021-22 would be carried out during Truing-Up of FY 2021-22.

5.14 TOTAL INTEREST AND FINANCE COST

Petitioner's Submission

5.14.1 As discussed above, the details of total interest and finance charges estimated for FY 2021-22 is given in the Table below:

TABLE 5-30: TOTAL INTEREST AND FINANCE CHARGES SUBMITTED FOR FY 2021-22 (RS. CRORE)

Sl. No.	Description	Tariff Order for FY 2021-22 dated 26.08.2021	Claimed in APR
1	Interest on Long term loans	45.36	55.52

Sl. No.	Description	Tariff Order for FY 2021-22 dated 26.08.2021	Claimed in APR
2	Interest on working capital	-	0.11
3	Interest on security deposit	11.79	11.97
4	Finance Charges	-	2.01
5	**Total Interest & Finance Charges**	**57.14**	**69.61**

Commission's Analysis

5.14.2 The Commission has observed that the revised total Interest and finance cost for FY 2021-22 are higher than that approved by the Commission vide Tariff Order dated August 26, 2021 for FY 2021-22.

5.14.3 In accordance with Regulation 45.3 of the MYT Regulations, 2019, the finance charges shall be part of A&G expenses for the Control Period from FY 2020-21 to FY 2024-25. Therefore, the Petitioner's contention to allow finance charges for FY 2021-22 is not permissible.

5.15 GROSS FIXED ASSETS (GFA) AND DEPRECIATION

Petitioner's Submission

5.15.1 The Petitioner submitted that the computation of GFA for FY 2021-22 is shown in the Table below: -

TABLE 5-31: GROSS FIXED ASSETS SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Sl. No.	Description	Tariff Order for FY 2021-22 dt. 26.082021	Claimed in APR
			Closing GFA FY 2021-22
1	Opening Balance	1,439.98	1,777.33
2	Addition during the Year	239.71	290.94
3	Retirement during the Year	6.65	6.58
4	**Closing Balance**	**1,673.04**	**2,061.69**

5.15.2 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.

5.15.3 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.

5.15.4 The summary of Depreciation as submitted by the Petitioner for FY 2021-22 is shown the table below:

TABLE 5-32: DEPRECIATION SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Sl. No.	Description	Tariff Order for FY 2021-22 dated 26.08.2021	Claimed in APR
1	Depreciation on Gross Block till 01.04.2020	56.73	56.90
2	Depreciation on Gross Block after 01.04.2020		13.69
3	**Gross Depreciation for the Year**	**56.73**	**70.59**
4	Less: Depreciation on Consumer Contribution	10.61	10.45
5	**Net Depreciation**	**46.12**	**60.13**
6	Average GFA	1,556.51	1,919.51
7	Weighted Average Depreciation Rate	3.64%	3.68%

Commission's Analysis

5.15.5 The Commission has observed that the revised closing balance of GFA as shown by the Petitioner is higher than that approved by the Commission vide Tariff Order dated August 26, 2021 for FY 2021-22.

5.15.6 The analysis of Depreciation for FY 2021-22 would be carried out during Truing-Up of FY 2021-22.

5.16 MISCELLANEOUS EXPENSE

Petitioner's Submission

Loss on Retirement/ Impairment of Asset:

5.16.1 The Petitioner submitted that the it has estimated expense on account of sale / retirement of Fixed Assets during FY 2021-22 as Rs. 1.94 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 5-33: OTHER MISCELLANEOUS ITEMS SUBMITTED BY THE PETITIONER FOR FY 2021-22

Sl. No.	Description	Tariff Order for FY 2021-22 dated 26.07.2021	Claimed in APR
1	Loss on sales of assets	-	1.94
2	Impact of GST	-	1.91
	Total	**-**	**3.85**

Commission's Analysis

5.16.2 The analysis of Miscellaneous expenses for FY 2021-22 would be carried out during Truing-Up of FY 2021-22.

5.17 PROVISION FOR BAD AND DOUBTFUL DEBTS

Petitioner's Submission

5.17.1 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 2021-22 and past periods the Petitioner has estimated the Provision for Write-off of Bad and Doubtful Debts for FY 2021-22.

5.17.2 The estimate of the bad debts in accordance with the policy of the Petitioner for FY 2021-22 is as provided in Table Below: -

TABLE 5-34: PROVISION FOR BAD & DOUBTFUL DEBTS SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Sl. No.	Description	Tariff Order for FY 2021-22 dated 26.07.2021	Claimed in APR
1	Revenue billed for the year	2049.03	2040.51
2	Provision as % of Revenue billed	0.93%	2.00%
3	**Provision of bad and doubtful debt**	**19.07**	**40.81**

Commission's Analysis

5.17.3 The Commission has observed that the revised Provision for Bad & Doubtful Debts as shown by the Petitioner is higher than that approved by the Commission vide Tariff Order dated August 26, 2021 for FY 2021-22.

5.17.4 The analysis of Provision of bad debts for FY 2021-22 would be carried out during Truing-Up of FY 2021-22.

5.18 INCOME TAX

Petitioner's Submission

5.18.1 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

5.18.2 The Petitioner submitted that, on September 20, 2020, 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

5.18.3 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 2021-22 at the rate of 25.17% as against normal tax rate of 34.94%.

5.18.4 Considering the above Regulation, the Petitioner has computed the income tax liability for FY 2021-22 as shown in Table below: -

TABLE 5-35: INCOME TAX SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Sl. No.	Particulars	Ref.	Tariff Order for FY 2021-22 dated 26.07.2021	Claimed in APR
1	Return on Equity	a	56.57	73.59
2	Income Tax Rate	b	25.17%	25.17%
3	Total Tax Expense	c=a x b/(1-b)	19.03	24.75

5.18.5 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 2021-22.

Commission's Analysis

5.18.6 The Commission has observed that the revised Total Tax Expense as shown by the Petitioner is higher than that approved by the Commission vide Tariff Order dated

August 26, 2021 for FY 2021-22. Further analysis of Income Tax for FY 2021-22 would be carried out during Truing-Up of FY 2021-22.

5.19 CONTINGENCY RESERVE

Petitioner's Submission

5.19.1 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

5.19.2 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 5-36: CONTINGENCY RESERVE SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Sl. No.	Particulars	Claimed in APR
1	Opening GFA	1,777.33
2	% of Opening GFA	0.25%
3	Contribution to Contingency Reserve	4.44

5.19.3 Thus, as a matter of prudent practice, the Petitioner requested the Commission to allow provision of contingency reserve in ARR for FY 2021-22 as claimed above.

Commission's Analysis

5.19.4 The Commission has noted the same. Further analysis of Contingency Reserve for FY 2021-22 would be carried out during Truing-Up of FY 2021-22.

5.20 RETURN ON EQUITY (ROE)

Petitioner's Submission

5.20.1 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 2021-22 is given in Table below: -

TABLE 5-37: COMPUTATION OF RETURN ON EQUITY SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Sl. No.	Particulars	Ref.	Tariff Order for FY 2021-22 dated 26.07.2021	Claimed in APR
1	Regulatory Equity Base at the beginning of the year	a	359.06	464.00
2	Asset Capitalized during the year	b	239.71	290.94
3	Equity portion of Assets Capitalised during the year	c	36.17	53.26
4	**Regulatory Equity Base at the end of the year**	**d=a+c**	**395.23**	**517.25**

Sl. No.	Particulars	Ref.	Tariff Order for FY 2021-22 dated 26.07.2021	Claimed in APR
5	Return on Opening Regulatory Equity Base @ 15%	e=ax16%	53.86	69.60
6	Return on Addition to Equity Base during the year @15%	f=cx16%/2	2.71	3.99
7	**Total Return on Equity**	**g=e+f**	**56.57**	**73.59**

Commission's Analysis

5.20.2 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 August 26, 2021 for FY 2021-22. Further analysis of Return on Equity for FY 2021-22 would be carried out during Truing-Up of FY 2021-22.

5.21 NON-TARIFF INCOME

Petitioner's Submission

5.21.1 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 2021-22 is given in the Table below:

TABLE 5-38: NON-TARIFF INCOME AS SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Sl. No.	Particulars	Tariff Order for FY 2021-22 dated 26.07.2021	Claimed in APR
1	Income from Contingency Reserve Investments	9.36	0.13
2	Miscellaneous Receipts from consumers		1.22
3	Miscellaneous receipts from other sources		0.85
4	Delayed Payment Surcharge		5.25
5	**Total Non-Tariff Income***	**9.36**	**7.45**

5.21.2 The Petitioner submitted that Regulation 25.2 of the MYT Regulations, 2019 provides 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

<u>(iii) One and half month equivalent of the expected revenue from charges for use of Distribution system at the prevailing Tariff (excluding Electricity Duty)</u>;

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

5.21.3 The normative working capital computed as per above regulation compensates the Discom only for the 45 days of credit period which is given to the consumers. However, Delayed Payment Surcharge accrues when a consumer defaults in payment of bills as per due date which is generally 15 days from the date of billing which happens to be 2-7 days after the meter reading date which is generally taken after 30 /31 days interval. Hence, the total number of days after which the delayed payment surcharge accrues is almost 55 days which is more than the number of days for which a distribution licensee is compensated by interest on working capital as per above i.e., 45 days.

5.21.4 Thus, it can be concluded that DPS belongs to the period beyond normative period of 45 days for which interest on working capital is not provided in the Distribution Tariff Regulations., while, the late payment surcharge is charged only if the delay is more than normative credit period. Accordingly, for the period of delay beyond the normative period, the Discom has to be compensated with the cost of such additional financing.

5.21.5 The Petitioner mentioned that debtors older than 60 days but not more than 90 days are funded only to the extent of 75% of such debtors by the Banks / FIIs and remaining is contributed by the Petitioner through equity. Further, debtors older than 90 days are not funded by the Banks at all and the same is being financed by the Petitioner through equity. Thus, to adequately compensate the Petitioner, the Commission has been, hitherto, approving the financing cost of such deferred receivables at the rate equivalent to weighted average SBI-PLR from previous Tariff Orders.

5.21.6 Accordingly, based on the by the Commission in its various Tariff Orders, Delayed Payment Surcharge has been considered after reducing the cost of funds borrowed for the purpose of funding the deferred receivables which are subsequently recovered along with Delayed Payment Surcharge. Thus, the cost of borrowing in respect of Delayed Payment Surcharge for FY 2020-21 has been computed as given in the Table below:

TABLE 5-39: COST OF BORROWING FOR DPS SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Particulars	Reference	Tariff Order for FY 2021-22 dated 26.07.2021	Claimed in APR
Delayed Payment Surcharge Received	a	5.25	5.25
Working Capital Amount Utilisation @ 24% p.a.	b= (a / 24%)	21.87	21.87
Applicable Interest Rate for Working Capital Finance	c	10.65%	9.50%
Cost of Borrowing for DPS	**d=b x c**	-	**2.08**

5.21.7 Accordingly, the non-tariff income has been considered after reducing the cost of borrowing of deferred payment beyond normative period from the total non- tariff income for the purpose of APR as summarized in Table below: -

TABLE 5-40: NET NON-TARIFF INCOME SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Particulars	Reference	Tariff Order for FY 2021-22 dated 26.07.2021	Claimed in APR
Non-Tariff Income including DPS	a	9.36	7.45
Less: Cost of Borrowing for DPS	b	-	(2.08)
Net Non-Tariff Income	**c=a-b**	**9.36**	**5.37**

Commission's Analysis

5.21.8 The Commission has observed that the total revised Non-Tariff Income as submitted by the Petitioner is lower than that approved by the Commission vide Tariff Order dated August 26, 2021. Further analysis of Non- Tariff Income would be carried out during Truing-Up of FY 2021-22.

5.22 REVENUE FROM SALE OF POWER

Petitioner's Submission

5.22.1 The Petitioner has submitted that during FY 2021-22, it has recorded sales of 2375.84 MUs reflecting decline of 3.95% over the sales approved by the Commission vide Tariff Order dated August 26, 2021 for FY 2021-22. Similarly, the billed revenue excluding Regulatory Surcharge has decreased to Rs. 1,943.34 Crore reflecting decline of 5.16% over the revenue approved by the Commission vide Tariff Order dated August 26, 2021 for FY 2021-22. The category-wise sales, revenue and average realization for FY 2021-22 as submitted by the Petitioner are given in the Table below:

TABLE 5-41: REVENUE FOR FY 2021-22 SUBMITTED BY THE PETITIONER

Sl. No.	Category	Sales	Revenue	Average Realisation
		(MU's)	(Rs. Cr.)	(Rs/kWh)
1	LMV-1: Domestic Light, Fan & Power	712.52	494.08	6.93
2	LMV-2: Non Domestic Light & Fan & Power	41.57	47.21	11.36
3	LMV-3: Public Lamps	35.59	33.34	9.37
4	LMV-4: Institutions	15.78	13.64	8.64
5	LMV-5: Private Tube Wells	18.88	3.54	1.88
6	LMV 6: Small and Medium Power	103.00	103.70	10.07
7	LMV-7: Public Water Works	24.12	24.25	10.05
8	LMV-8: STW and Pumped Canals	0.09	0.12	13.97
9	LMV-9: Temporary Supply	48.41	49.20	10.16
10	LMV-11: Electric Vehicle Charging	1.80	1.35	7.50
11	HV-1: Non Industrial Bulk Power	240.88	248.40	10.31
12	HV-2: Large and Heavy Power	1,133.19	924.51	8.16
13	**Total**	**2,375.84**	**1,943.34**	**8.18**

Commission's Analysis

5.22.2 The analysis of Sales and Revenue would be carried out during Truing-Up of FY 2021-22.

5.23 ARR SUMMARY & REVENUE GAP

Petitioner's Submission

5.23.1 Based on above mentioned Expenditure and Revenue, the Aggregate Revenue Requirement for FY 2021-22 as computed on the basis of the MYT Regulations, 2019 is given in Table below: -

TABLE 5-42: SUMMARY OF ARR SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Particulars	Tariff Order for FY 2021-22 dated 26.07.2021	Claimed in APR
Power Purchase Expenses for the Year	1,044.51	1352.00*
Transmission Charges	200.46	176.49
Net Employee cost (Incl. Retiral Benefits)	21.25	68.40
A&G expenses	14.51	19.44
R&M expenses	39.16	59.79
Smart Metering / DT Metering / SOP implementation OPEX	-	9.40
Interest Charges	57.14	69.61
Depreciation	46.12	60.13
Contingency reserve	-	4.44
Income Tax	19.03	24.75
GST impact	-	1.91
Provision for Bad & Doubtful Debts	19.07	40.81
Loss on sale of fixed assets	-	1.94
Return on Equity	56.57	73.59
Less: Non Tariff Income	9.36	5.37
Annual Revenue Requirement	**1,508.46**	**1945.65**
Revenue from Approved Tariff	2,049.03	1,943.34
Revenue Gap / (Surplus)	**(540.57)**	**(2.31)**

** Apart from the Power Purchase submitted in the APR for FY 2021-22, the Petitioner vide additional affidavit claimed the impact of DIL True up of Rs. 356.37 Crore.*

Commission's Analysis

5.23.2 The Commission has observed that the revised Aggregate Revenue Requirement for FY 2021-22 as submitted by the Petitioner is higher than that approved by the Commission vide Tariff Order date August 26, 2021. Further, the analysis of Annual Revenue Requirement (ARR) for FY 2021-22 would be carried out during Truing-Up of FY 2021-22.

5.24 CARRYING COST

5.24.1 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

5.24.2 Based on the same principles, the carrying cost of Regulatory Asset created and subsequent recoveries till FY 2021-22 is given in the Table below: -

TABLE 5-43: CARRYING COST SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

Sl. No.	Particulars	Ref.	Tariff Order for FY 2021-22 dated 26.07.2021	Claimed in APR
1	**Regulatory Assets at the beginning of Year**	a	(548.99)	136.80
2	Addition to Regulatory Assets during the year	c	(540.57)	2.31
3	Closing Regulatory Assets (before Carrying cost for the year)	d=a+b+c	(1,089.55)	**139.11**
4	Average Regulatory Asset	e=(a+d)/2	(819.27)	137.95
5	Applicable Interest Rate for Working Capital Finance	f	10.65%	9.50%
6	**Carrying Cost of Regulatory Asset**	**g=ex f**	**(87.25)**	**13.11**

Commission's Analysis

5.24.3 The analysis of Annual Revenue Requirement (ARR), Revenue Gap and corresponding carrying cost for FY 2021-22 would be carried out during Truing-Up of FY 2021-22.

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 2020-21 based on the audited accounts and APR for FY 2021-22. 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 2020-21, APR for FY 2021-22 and ARR for FY 2022-23 by November 30, 2021. The Petitioner filed the Petition for determination of True-Up for FY 2020-21, APR for FY 2021-22 and ARR & Tariff for FY 2022-23 on November 26, 2021.

6.1.2 In this Chapter, the Commission has discussed in detail each component of ARR for FY 2022-23.

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 Order dated November 26, 2020 has approved the no. of consumers, connected load and sales for FY 2022-23 as given in Table below:

TABLE 6-1: SUMMARY OF DEMAND ESTIMATES APPROVED BY THE COMMISSION FOR FY 2022-23 VIDE BUSINESS PLAN ORDER DATED 26.11.2021

Sl. No.	Category	No. of consumers (No.)	Connected Load (in MW)	Sales (MU)
1	LMV-1: Domestic Light, Fan & Power	1,02,714	468	661.53
2	LMV-2: Non Domestic Light & Fan & Power	3,789	33	46.47
3	LMV-3: Public Lamps	295	11	41.45
4	LMV-4: Institutions	570	7	22.75
5	LMV-5: Private Tube Wells	1,371	7	24.54
6	LMV 6: Small and Medium Power	3,778	89	99.41
7	LMV-7: Public Water Works	250	9	24.90
8	LMV-8: STW and Pumped Canals	11	0	0.21
9	LMV-9: Temporary Supply	882	25	65.85
10	LMV-11: Electric Vehicle Charging	152	13	15.97
11	HV-1: Non-Industrial Bulk Power	272	164	336.00
12	HV-2: Large and Heavy Power	997	502	1304.38
13	**Total**	**1,15,080**	**1,325.56**	**2,643.46**

6.2.4 The Petitioner submitted that the entire world is reeling from COVID-19 pandemic and under the current scenario, where the number of Covid infected patients is further rising, it is highly uncertain to project the demand for FY 2022-23. In such a scenario, the Petitioner has prepared the projections for Sales and Revenue for FY 2022-23 assuming there would be no 3rd wave of Covid-19 pandemic beyond September, 2021. The Operations, Sales and Revenue for FY 2022-23 has been projected considering business as usual as it was before the Covid-19 pandemic. However, continuation of pandemic beyond current FY 2021-22 may result in variation in the estimates. Further, the sales for FY 2020-21 and FY 2021-22 (h1) are highly affected by COVID -19 pandemic, hence, the same cannot be utilised for the purpose of projecting the sales for the subsequent period. Thus, the Petitioner stated that it has considered the CAGR over FY 2013-14 to FY 2019-20 (7 years) for the purpose of projecting the sales for FY 2022-23. Apart from the above, the sales / revenue have been further adjusted based on various estimates, economic conditions, conversion of single point to multipoint connections, upcoming high-rise projects, ongoing projects / schemes of the Central / State Govt. and present circumstances of restrictions on commercial activities etc.

6.2.5 The Petitioner further submitted that, based on various efforts made by the State

Government to attract new investments in the region and plans made by the Development Authority concerning new Industries, Commercial and Domestic projects, the Petitioner is expecting a huge growth in demand of electricity in its licensed area in coming years. Various schemes / upcoming projects in Greater Noida has already been explained in detail in the petition for approval of Business Plan for the Control Period from FY 2020-21 to FY 2024-25.

6.2.6 In view of the above, the sales and revenue models have been prepared based on the latest demand forecasts. The projected no. of consumers, connected load and sales for FY 2022-23 as given in Table below:

TABLE 6-2: SUMMARY OF BILLING DETERMINANTS AS SUBMITTED BY THE PETITIONER FOR FY 2022-23

Sl. No.	Category	No. of consumers (No.)	Connected Load (in MW)	Sales (MU)
1	LMV-1: Domestic Light, Fan & Power	1,40,385	535	852.78
2	LMV-2: Non Domestic Light & Fan & Power	4,339	41	47.57
3	LMV-3: Public Lamps	377	12	37.87
4	LMV-4: Institutions	552	7	16.97
5	LMV-5: Private Tube Wells	1,292	7	20.45
6	LMV 6: Small and Medium Power	3,983	95	116.96
7	LMV-7: Public Water Works	265	10	26.69
8	LMV-8: STW and Pumped Canals	8	0	0.07
9	LMV-9: Temporary Supply	797	20	52.29
10	LMV-11: Electric Vehicle Charging	62	4	5.19
11	HV-1: Non Industrial Bulk Power	275	161	333.37
12	HV-2: Large and Heavy Power	955	519	1,269.96
13	**Total**	**1,53,290**	**1,410.58**	**2,780.19**

6.2.7 The Petitioner has submitted that, in order to meet the rising demand of the Greater Noida area, it had asked UPPTCL to provide connectivity for additional 100 MW capacity from their upcoming substation at Sector-148 Noida. UPPTCL provided the connectivity in the month of February, 2021. The Petitioner's planning helped in serving peak Demand of 522 MW during FY 2021-22 witnessed on July 07,2021 (post lockdown) as compared to the demand of 446 MW in the previous year i.e., FY 2020-21.

6.2.8 The Petitioner further submitted that the Commission had earlier directed to convert all unmetered connections under LMV-1 & LMV-5 categories to metered consumers by the end of March 31, 2021. In this regard, due to lockdown / restrictions or guidelines enforced by various Govt. Agencies and also due to ongoing resistance of the consumers, the Petitioner was not able to convert unmetered consumers to metered category by the end of March 31, 2021 significantly. Because of the above and also due to increased supply hours & consumption during quarantine periods, the sales in LMV-1 and LMV-5 categories (including supplementary sales from theft cases) has been estimated at 8.93 MU and 4.00 MU.

6.2.9 The Petitioner 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. There are 118 villages in Petitioner’s licensed area, which also has lot of migrant labour/ encroachers who are often found to be 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, the Petitioner 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. Such assessed and recovered amount is also included in the sales of LMV-1 and LMV-5 categories which the Commission has been otherwise considering as “Excess Sales”.

6.2.10 The Petitioner submitted that above treatment of accounting for assessed consumption in theft cases are in sync with the judgment of the Hon’ble APTEL in the 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

6.2.11 The Petitioner further submitted that it has not released any new connection in unmetered category and currently, the number of consumers as well as the consumption under these categories is minimal (less than even 1 % of sales (MU) and 0.1% (of revenue) and also far less in comparison to other Discoms of U.P. At the same time, almost 40% of the Greater Noida Area is still under cultivation and power is being consumed by authorised / unauthorised connections.

6.2.12 However, in compliance to the directives of the Commission and after the relaxation of restrictions due to COVID pandemic, the Petitioner has laid fresh impetus on the conversion of unmetered connections into metered connections. Based on the outcome, site survey and the actual use of the consumers, the Petitioner expects to convert a significant number of consumers into metered category during FY 2021-22 and FY 2022-23.

6.2.13 While the efforts are still continuing, however, based on the status as on date and for the reasons explained above, the Petitioner requested the Commission to approve the sales and revenue proposed under these unmetered categories.

6.2.14 Accordingly, keeping the above in view and based on the provisional sales till September 30, 2021 and estimated demand from October 2021 to March 2022, the Petitioner has estimated the sales for FY 2022-23 at 2,780.19 MU.

6.2.15 The summary of category-wise projected sales, revenue and average realization for FY 2022-23 are given in the Table below: -

TABLE 6-3: PROJECTED ENERGY SALES AND 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	852.78	582.25	6.83
2	LMV-2: Non Domestic Light & Fan & Power	47.57	54.98	11.56
3	LMV-3: Public Lamps	37.87	35.34	9.33
4	LMV-4: Institutions	16.97	14.40	8.49
5	LMV-5: Private Tube Wells	20.45	4.27	2.09
6	LMV 6: Small and Medium Power	116.96	117.33	10.03
7	LMV-7: Public Water Works	26.69	26.92	10.09
8	LMV-8: STW and Pumped Canals	0.07	0.11	14.81
9	LMV-9: Temporary Supply	52.29	52.60	10.06
10	LMV-11:Electric Vehicle Charging	5.19	3.86	7.44
11	HV-1: Non Industrial Bulk Power	333.37	341.70	10.25
12	HV-2: Large and Heavy Power	1,269.96	1,035.10	8.15
13	**Total**	**2,780.19**	**2,268.87**	**8.16**

6.2.16 In view of the above, the Petitioner requested the Commission to consider the above estimated sales and revenue for ARR for FY 2022-23.

Commission's Analysis

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.

6.2.18 The Commission has observed that there is a variation between the billing determinants (Number of Consumers, Connected Load and Sales) submitted by the Petitioner and billing determinants approved in the Business Plan Order dated November 26, 2020. The Commission vide deficiency dated December 31, 2021 directed the Petitioner to provide the justification for such variation. In response to the Commission's query the Petitioner submitted that the Billing Determinates provided for FY 2022-23 vide Petition No. 1526 of 2019 for approval in Business Plan was based on the information available upto September 2019 whereas the Billing Determinates submitted vide Petition No. 1797 of 2021 dated November 26, 2021 for approval of ARR for FY 2022-23 is based on the provisional data upto September 2021 and latest estimate for the remaining period which gives more certainty about the latest trend, therefore there is a difference in the earlier data approved at the time of Business Plan and the present data submitted vide Petition No. 1797 of 2021.

6.2.19 The Commission has observed that there is an increase in the Number of Consumers and Sales to domestic consumers (LMV-1) from FY 2020-21 to FY 2022-23. The Petitioner submitted that there is an increase of 23% in no. of consumers under the Domestic category i.e. LMV-1 from FY 2020-21 to 2021-22 and 19% from FY 2021-22 to FY 2022-23. Further, in case of Sales, there is an increase of 15% from FY 2020-21 to 2021-22 and 20% from FY 2021-22 to FY 2022-23. The Petitioner further submitted that the major reason for increase in the number of consumers is on account of releasing individual connections to the residents of multi-storey societies in compliance to the directions of the Commission.

6.2.20 The Commission has observed that there is an increase in the Sales to HV-1 and HV-2 consumers from FY 2020-21 to FY 2022-23. In response to the Commission query, the Petitioner submitted that there is an increase of 46% in Sales under the Non-Industrial Bulk load i.e. HV-1 from FY 2020-21 to 2021-22 and 38% from FY 2021-

22 to FY 2022-23. The HV-1 category mainly contains Institutions and Large Commercial Complexes which were under complete shut down during most part of FY 2020-21 due to lockdown caused by COVID-19 resulting drastic decrease in during FY 2020-21. The Sales under this HV-1 category have been picking up during FY 2021-22 and accordingly, the Petitioner has estimated/projected the Sales under HV-1 category taking into consideration business as usual. Similarly, there was an increase of 15% in Sales under the Large and Heavy Power i.e. HV-2 from FY 2020-21 to 2021-22 and projected by 12% from FY 2021-22 to FY 2022-23.

6.2.21 The Petitioner further added that sales for FY 2020-21 and FY 2021-22 (h1) are highly affected by COVID -19 pandemic, hence, the same cannot be utilised for the purpose of projecting the sales for the subsequent period. Thus, the Petitioner stated that it has considered the CAGR over FY 2013-14 to FY 2019-20 (7 years) for the purpose of projecting the sales for FY 2022-23. Apart from the above, the sales / revenue have been further adjusted based on various estimates, economic conditions, conversion of single point to multipoint connections, upcoming high-rise projects, ongoing projects / schemes of the Central / State Govt. and present circumstances of restrictions on commercial activities etc.

6.2.22 The Petitioner further submitted that, based on various efforts made by the State Government to attract new investments in the region and plans made by the Development Authority concerning new Industries, Commercial and Domestic projects, the Petitioner is expecting a huge growth in demand of electricity in its licensed area in coming years. Various schemes / upcoming projects in Greater Noida has already been explained in detail in the petition for approval of Business Plan for the Control Period from FY 2020-21 to FY 2024-25.

6.2.23 The Commission has already deliberated on the Billing determinants for the Control Period FY 2020-21 to FY 2024-25 and approved the Billing determinants in the Business Plan Order dated November 26, 2020. However, while approving the billing determinants in the Business Plan, the Commission had assumed that the things would get back to normal in FY 2022-23 and demand would pick up. Further, taking into consideration that after the relaxation in Covid-19 restrictions, the

Petitioner has laid fresh impetus on the conversion of unmetered connections into metered connections in FY 2022-23 and would be converting significant number of consumers into metered category. Therefore, the Commission has considered the billing determinants as proposed by the Petitioner for FY 2022-23.

6.2.24 The billing determinants approved for FY 2022-23 are shown in the Table below:

TABLE 6-4: APPROVED BILLING DETERMINANTS FOR FY 2022-23

Sl. No.	Category	No. of consumers	Connected Load (MW)	Sales (MU)
1	LMV-1: Domestic Light, Fan & Power	1,40,385	534.79	852.78
2	LMV-2: Non-Domestic Light & Fan & Power	4,339	40.67	47.57
3	LMV-3: Public Lamps	377	11.80	37.87
4	LMV-4: Institutions	552	7.14	16.97
5	LMV-5: Private Tube Wells	1,292	6.50	20.45
6	LMV 6: Small and Medium Power	3,983	95.10	116.96
7	LMV-7: Public Water Works	265	10.46	26.69
8	LMV-8: STW and Pumped Canals	8	0.10	0.07
9	LMV-9: Temporary Supply	797	20.14	52.29
10	LMV-11: Electric Vehicle Charging	62	4.38	5.19
11	HV-1: Non-Industrial Bulk Power	275	160.60	333.37
12	HV-2: Large and Heavy Power	955	518.89	1,269.96
13	**Total**	**1,53,290**	**1,410.58**	**2,780.19**

6.3 ENERGY BALANCE AND DISTRIBUTION LOSSES

Petitioner's Submission

6.3.1 The Petitioner submitted that the it has been striving to implement/emulate efficient, resilient, robust, inclusive, tailor-made initiatives to tackle the ever-rising menace i.e., commercial loss, which all distribution utilities are struggling hard to chain. While many initiatives tendered significant results but sometimes most worthy models failed due to the volatile environment, which are beyond the control of the distribution licensee. Some of these issues significantly giving rise to pilferage are as follows-

i. Local Authority restraining the Petitioner from providing electricity connection in unplanned and un-authorized colonies leading to unauthorized tapping of energy. The menace has been quite high in Doob area of Greater Noida which is witnessing rapid build-up of colonies considering growing urbanization and all-round development.

ii. Greater Noida being a developing city with many vacant residential premises, has attracted unauthorized occupants in urban areas who also indulge in hooking and tapping of electricity.

iii. In villages and unauthorised colonies, due to lack of planned development and no authority for approving “Naksha”, at many places, the electrical network is being exploited to such a level where even the electrical poles / transformers are being covered within the boundary / four wall of the houses leading to theft/ pilferage. Due to widespread land acquisition in Greater Noida, allocation of certain percentage of land to farmers and development of private colonies and allocation, the above practice is quite frequent and wide spread in Greater Noida Area.

iv. Increased hours of supply in rural areas i.e. from 12-16 hours to at-least 18-22 hrs in accordance with the State Government directions. In this regard, a letter no. 1686/24-P-3-2018 dated August 03, 2018 was written by the Principal Secretary (Energy), Govt. of UP wherein the Petitioner was directed to provide 18 hours power supply in villages failing which action will be taken against the Petitioner in accordance with the conditions of license of the Petitioner. Therefore, the Petitioner had to further increased power supply in villages. However, it'll result into higher T&D losses and bad debts due to non-payment of bills.

6.3.2 Earlier, the Petitioner was able to contain T & D loss at 8% by curtailing load in the loss prone areas but with the strict direction to increase power supply in rural areas for at-least 18 hours irrespective of high losses and non-payment of bills, the T&D Loss cannot be contained at 8% level. Further, these villagers are adding many of the electrical/electronic items such as air conditioners, large TVs, washing machines, mobile phone, Laptops etc., without paying their electricity dues. This has seriously impacted the Petitioner’s efforts to contain its losses at 8%.

6.3.3 The Petitioner submitted that the following are the pre-requisites for effectively controlling T & D Losses: -

a) **On the part of the Licensee:**

   I. Robust Distribution Network;

   II. Identification of theft prone areas;

   III. Educating / spreading awareness / information about social, environmental, safety and legal consequences of power theft

   IV. Periodical Loss control Drives

   V. Registering FIRs / Court Cases

b) **Active support of Village Pradhans, RWAs & Local leaders (Society):** The Petitioner submitted that it is diligently performing its duties for loss control as stated above, however, for variety of reasons, societal support is often found missing and many times, rather working contrary i.e., involving in theft by themselves, putting undue pressure / threats on the officials of the Petitioner to just let-off such wrong doers or blatantly helping them.

c) **Speedy action by Police and Special Court**: In this regard, it is pertinent to mention that as on October 31, 2021, 11,592 cases are pending in special courts, 4,572 cases are awaiting in the process of filing in the Special Court. Also, 840 FIRs are pending for investigation by the Police apparently due to highly overburdened system and pre-occupation in other important matters. Due to the above, the loss control drives being conducted by the Petitioner does not yield into desired results.

6.3.4 The petitioner submitted that, if any of the above pre-requisites fails to work appropriately, then the desired result will not be achieved.

6.3.5 The Petitioner submitted that despite the above challenges, it had accomplished the economically achievable level of loss reduction. The Distribution System of the Petitioner consists of 33 kV lines, 11 kV lines and 400 Volts lines across its licensed area spreading over 335 sq. kms. The technical losses itself involved in the transformation and wheeling/ conveyance of power contributes major part of the loss level of 8% and such technical losses are going up with an addition of more transformers and distribution network. Even, the cost benefit analysis does not warrant capital investments to be made to further reduce the technical losses due to adverse cost benefit ratio.

6.3.6 As per current estimates for FY 2022-23 the Distribution losses is given in Table below:

TABLE 6-5: ENERGY BALANCE AS SUBMITTED BY THE PETITIONER FOR FY 2022-23

Particulars	Approved	Projected
Energy Sales (MU)	2643.47	2,780.19
Distribution Loss %	7.70%	8.05%
Distribution Loss (MU)	220.53	243.40
Energy Purchase (MU)	2864.00	3,023.59

6.3.7 The Petitioner submitted that it has prepared the projections for sales and revenue for FY 2022-23 assuming there would be no 3rd wave of Covid-19 pandemic. The operations, sales and revenue for FY 2022-23 has been projected considering business as usual as it was before the Covid-19 pandemic. However, continuation of pandemic beyond FY 2021-22 may result in higher T&D losses for the reasons as already explained here-in-above.

6.3.8 The Petitioner submitted that the Commission is empowered under Regulation 56 of the MYT Regulations, 2019 i.e., “Power to remove difficulties” to approve T&D losses at 8.05% as against T & D Loss of 7.70% approved vide MYT Order dated November 26, 2020 considering the adverse impact on the operations of the Petitioner due COVID -19 pandemic and other reasons as explained above.

Commission’s Analysis

6.3.9 The Commission has observed that there is a variation between the distribution loss submitted by the Petitioner and the distribution loss approved in the Business Plan Order dated November 26, 2020. The Commission vide deficiency dated December 31, 2021 directed the Petitioner to provide the justification for such variation. In response to the Commission’s query, the Petitioner submitted that the distribution loss submitted for FY 2022-23 vide petition no. 1526 of 2019 for approval in Business Plan was based on the information available upto September

2019 whereas the distribution loss submitted vide Petition no. 1797 of 2021 dated November 26, 2021 for approval of ARR for FY 2022-23 is based on the provisional data upto September 2021 and latest estimate for the remaining period which gives more certainty about the latest trend, therefore there is a difference in the earlier data approved at the time of Business Plan and the present data submitted vide Petition no. 1797 of 2021.

6.3.10 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 the Business Plan Order dated November 26, 2020. Accordingly, the distribution loss approved for FY 2022-23 is shown in the Table below:

TABLE 6-6 : APPROVED ENERGY BALANCE AND DISTRIBUTION LOSS FOR FY 2022-23

S. No.	Category	ARR Petition for FY 2022-23	Approved for FY 2022-23
1	Energy Sales (MU)	2780.19	2780.19
2	Distribution loss %	8.05%	7.70%
3	Distribution losses (MU)	243.40	231.93
4	**Energy Purchase at Discom Periphery (MU)**	**3023.59**	**3012.12**
5	Intra State Losses (%)	3.22%	3.27%
6	Energy at UP Periphery (MU)	3124.17	3113.89
7	Inter-State Losses (%)	3.00%	3.05%*
8	Units at Ex-Bus (MU)	**3220.86**	**3211.82**

* *Reason for higher Inter-State Losses is because we are disallowing UI for which Petitioner has shown Inter-State and Intra-State transmission loss as nil and the same units are provisionally purchased either from Inter or Intra Sources.*

6.3.11 It can be observed from the table above that the Petitioner has claimed energy purchase of 3023.59 MU while after approved distribution losses of 7.70% and sales of 2780.19 MU, the total approved energy purchase is 3012.12 MU at NPCL Periphery.

6.4 POWER PROCUREMENT

6.4.1 The Petitioner has revised the power purchase for FY 2022-23 vide submission dated June 08, 2022, wherein short term power purchase was amended and there was no change in other sources. The complete details of all the sources, after considering the revised power purchase is discussed below:

Petitioner's Submission

6.4.2 The Petitioner submitted that considering, the energy balance, it has planned to meet its energy requirement for FY 2022-23 from the following sources: -

Long Term Power Purchase Agreement

6.4.3 The Petitioner submitted that the Long Term PPA with M/s 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 1274.05 MU at Ex-DIL Bus which is equivalent to normative availability i.e., 85% NAPAF specified in the Generation Tariff Regulations.

6.4.4 The Petitioner further submitted that it has computed the cost of power on the basis of tariff proposed by M/s DIL in its Petition for determination of tariff for FY 2019-20 to FY 2023-24. Accordingly, the summary of power procured from M/s DIL is provided in the Table below:

TABLE 6-7: LONG TERM POWER PROCUREMENT SUBMITTED BY PETITIONER FOR FY 2022-23 (RS. CRORE)

S.No	Description	UoM	Projected
1	Contracted Quantum at ex-DIL	MW	171
2	No of Days	-	365
3	Hours	-	24
4	Normative Availability	%	85%
5	***Units at Normative Availability****	***MU***	**1274.05**
6	Utilisation of Available Capacity	%	85%
7	Units at Ex-Bus (Forecast Schedule)	MU	1274.05
8	Inter-State Losses	%	3.24%
9	***Units at UP Periphery***	***MU***	**1232.77**
10	Intra-State Losses	%	3.27%
11	Units at NPCL	MU	**1192.46**
12	Fixed Cost per unit	Rs. kWh	1.838
13	Fixed cost as per DIL MYT petition no. 1531/2019 (Rate per kWh at serial no.12 above X Units at Normative availability at Serial No 5 above)	Rs. Cr.	234.17
15	Energy Cost per unit	Rs. kWh	2.953
16	Energy cost as per DIL Tariff petition no. 1531/2019 (Rate per kWh at serial no.15 above X Units at Normative availability at Serial No 7 above)	Rs. Cr.	376.23
18	Total Energy Cost	Rs. Cr.	610.40
19	Inter-State Trans. Charges	Rs. Cr.	74.08
20	Intra-State Trans. Charges	Rs. Cr.	28.87

S.No	Description	UoM	Projected
21	**Total Cost**	**Rs. Cr.**	**713.34**
22	**Landed Rate**	**Rs. kWh**	**5.98**

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 Regulation-24(a) & 26(i) of UPERC Generation Tariff Regulations, 2019 provides methodology for payment of Fixed Charges under Long-term Power Purchase Agreement as 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 The Petitioner submitted that from the above, it may be seen that the 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%.

6.4.9 The Petitioner submitted that the above-mentioned fixed Charges and energy Charges are also in line with the principles /methodology as approved in DIL's Tariff Order dated February 05, 2019.

6.4.10 The Petitioner submitted that the tariffs approved by the Commission vide Order dated February 05, 2019 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 alongwith coal escalation charges.

6.4.11 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 alongwith coal escalation charges for the purpose of estimation of power purchase cost for FY 2022-23 subject to true-up in subsequent years.

6.4.12 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 2022-23 and the same would be claimed subsequently at the time of truing-up based on receipt of Bills from M/s DIL.

6.4.13 The Petitioner submitted that, M/s DIL has filed its true-up petition for FY 2016-17 to FY 2018-19 on August 14, 2019 and MYT petition no. 1531 of 2019 for determination of tariff for the control period from FY 2019-20 to FY 2023-24 in accordance with UPERC Generation Tariff Regulations 2019 on November 20, 2019. Any impact on the power purchase cost pursuant to the Order of the Commission on the above petitions would be consequently claimed by the Petitioner in the ARR

/ APR/ Truing-up petitions as the case may be.

6.4.14 The Petitioner further submitted that, in addition to above, following petitions are also pending before Commission for disposal:

i. Petition No. 1630/2019 for Prudence Check and use of Additional Coal in FY 2019-20

ii. Petition Non. 1654/2020 for truing-up of the 'Change in Law' claims of FY 2019-20

iii. Petition No. 1655/2020 seeking compensation due to increase in Chhattisgarh Environment Cess and Chhattisgarh Development Cess as a 'Change in Law' event

iv. Petition No. 1651/2020 for approval of capital expenditure on account of installation of FGD system as 'Change in Law' event

6.4.15 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

6.4.16 The Petitioner has 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 6-8: MTTPPA AGREEMENTS SUBMITTED BY PETITIONER (RS. CRORE)

Vendor	Source	Capacity	Duration	Period	Nature
APPCPL	DoP, GoAP	50 MW	RTC	Apr-Sep	Large Hydro
		25MW	4 Hrs	Oct-Nov	
		25MW	2 Hrs	Dec-Mar	
	DoP, GoN	25 MW	RTC	Apr-Sep	
		25MW	4 Hrs	Oct-Nov	
		25MW	2 Hrs	Dec-Mar	

6.4.17 The Petitioner submitted that tariff discovered through bidding at Rs. 5.46 per unit landed at NPCL Bus based on then prevailing transmission charges and losses was duly approved by the Commission vide Order February 28, 2020 alongwith respective medium-term power purchase agreements.

6.4.18 The Petitioner again submitted that it is pertinent to mention here 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.** The Parties also agree that the regulated charges applicable for transmission of electricity referred to hereinabove as on the Bid Date shall be deemed to be Rs. 75,97,20,000/- (Rupees Seventy Five Crore Ninety Seven Lacs Twenty Thousand Only) for and in respect of the Contracted Capacity$, which charges shall at all times be due and payable by the Supplier.*
>
> ***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

6.4.19 Accordingly, based on the applicable transmission charges and losses for Inter-State and Intra-State Transmission Utilities, during FY 2022-23 the Petitioner has estimated to procure 196.15 MU power from DoP, GoAP and 103.22 MU from DoP, GoN at the landed cost of Rs 5.29/kWh and Rs 5.30/kWh respectively as summarised in the Table below: -

TABLE 6-9: MEDIUM TERM POWER SUBMITTED BY PETITIONER FOR FY 2022-23

S. No	Description	UoM	G.o.AP	G.o.N
1	Contracted (Apr-Sep)- 24 Hrs	MW	50	25
2	Contracted (Oct-Nov)- 4 Hrs	MW	25	25
3	Contracted (Dec-Mar)- 2 Hrs	MW	25	25
4	No of Days	-	365	365
5	Forecasted Utilisation of Available Capacity	%	85%	85%
6	Units at Ex-Bus	MU	209.57	110.28
7	Inter-State Losses	%	3.24%	3.24%
8	**Units at UP Periphery**	**MU**	**202.78**	**106.71**
9	Intra-State Losses	%	3.27%	3.27%
10	**Units at NPCL**	**MU**	**196.15**	**103.22**
11	Fixed Cost per unit	Rs. kWh	2.099	2.094
12	Fixed Cost (S.no - 10 x 11)	Rs. Cr.	41.17	21.61
13	Energy Cost per unit	Rs. kWh	2.370	2.385
14	Energy Cost (S.no - 6 x 13)	Rs. Cr.	46.49	24.62
15	**Total Energy Cost**	**Rs. Cr.**	**87.66**	**46.23**
16	Inter-State Trans. Charges	Rs. Cr.	11.41	6.00
17	Intra-State Trans. Charges	Rs. Cr.	4.75	2.50
18	**Total Cost**	**Rs. Cr.**	**103.82**	**54.73**
19	**Landed Rate**	**Rs. kWh**	**5.29**	**5.30**

6.4.20 Further, during FY 2021-22, based on the load profile, the Petitioner tied-up following additional Medium-Term Power through Competitive Bidding held on DEEP Portal in accordance with the Guidelines of Central Government as provided in Table:

TABLE 6-10: MTPPA AGREEMENTS SUBMITTED BY PETITIONER

Vendor	Source	Capacity	Duration	Period	Nature
APPCPL	Goodwill Energy, H.P.	15 MW	RTC	May-Sep	Large Hydro
TPTCL	G.o.HP	45 MW	RTC	May-Sep	

6.4.21 The Petitioner submitted that tariff discovered through bidding at Rs. 4.43 per unit landed at NPCL Bus based on the then prevailing transmission charges and losses was duly approved by the Commission vide Order May 10, 2021 along with respective medium-term power purchase agreements.

6.4.22 The Petitioner further submitted that since, the above tariff was also based on the then prevailing transmission charges and losses, the same would subsequently be payable at actuals in accordance with Article 5.5 and 5.6 of the above approved PPA.

6.4.23 Accordingly, based on the prevailing transmission charges and losses for Inter-State and Intra-State Transmission Utilities, during FY 2022-23 the Petitioner has estimated to procure 140.28 MU from TPTCL and 46.76 MU power from APPCPL at the landed cost of Rs. 4.46/kWh and Rs. 4.50/kWh respectively as summarised below in Table:

TABLE 6-11: PROPOSED MEDIUM TERM POWER SUBMITTED BY PETITIONER FOR FY 2022-23

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 Utilisation of Available Capacity	%	85%	85%
5	Units at Ex-Bus	MU	149.88	49.96
6	Inter-State Losses	%	3.24%	3.24%
7	**Units at UP Periphery**	**MU**	**145.02**	**48.34**
8	Intra-State Losses	%	3.27%	3.27%
9	**Units at NPCL**	**MU**	**140.28**	**46.76**
10	Fixed Cost per unit	Rs. kWh	1.616	1.697
11	Fixed Cost (S.no - 9 x 10)	Rs. Cr.	22.68	7.94
12	Energy Cost per unit	Rs. kWh	1.979	1.945

S. No	Description	UoM	M/S TPTCL (Source- G.o.HP)	M/S APPCPL (Source- Goodwill, HP)
13	Energy Cost (S.no - 9 x 12)	Rs. Cr.	27.76	9.09
14	Total Energy Cost	Rs. Cr.	50.44	17.03
15	Inter-State Trans. Charges	Rs. Cr.	8.66	2.89
16	Intra-State Trans. Charges	Rs. Cr.	3.40	1.13
17	**Total Cost**	**Rs. Cr.**	**62.50**	**21.05**
18	**Landed Rate**	**Rs. kWh**	**4.46**	**4.50**

6.4.24 The Petitioner submitted that it is pertinent to mention here 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.

6.4.25 The Petitioner further submitted that, as per Article 11.4.2 of the approved Medium-Term Agreements with M/s APPCPL and M/s TPTCL, the Petitioner is liable to pay full eligible fixed charges if Normative Availability during the year is 85% and in case the same is above 85%, then the Petitioner would also be liable to pay incentive corresponding to the energy procured above 85% normative availability. Accordingly, the Petitioner would be claiming any such additional charges, if the same arises at the time True-Up of ARR for FY 2022-23.

Short term power purchase agreements

6.4.26 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 2022-23 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 2022-23, the Petitioner has estimated cost of procurement of 954.55 MU power at NPCL Bus from various ST Sources including Bidding / IEX (during April-October 2021) with appropriate adjustment as specified in the following paragraphs.

6.4.27 The estimated cost of the aforesaid short-term power has been summarised in

Table below: -

TABLE 6-12: PROPOSED SHORT TERM POWER SUBMITTED BY PETITIONER FOR FY 2022-23 (RS. CRORE)

Description	Units (MUs) at NPCL	Rate/ kWh	Energy Charges (Rs.cr)	Trans. Cost (Rs.cr)	Amount (Rs. Cr.)	Rate/ kWh
Inter State Power (Peak)	125.55	6.36	85.36	10.09	95.45	7.60
Inter State Power (Night-Peak)	156.31	5.36	89.57	12.53	102.10	6.53
Inter State Power (Off-Peak)	267.24	4.29	122.39	21.32	143.71	5.38
Inter State Power (RTC)	405.45	4.70	203.61	32.32	235.93	5.82
Total ST Power	**954.55**	**4.91**	**500.93**	**76.26**	**577.19**	**6.05**

6.4.28 For estimating of cost of ST Power, following assumption have been taken by the Petitioner:

I. 125.55 MU Peak power estimated at Average IEX rate for Evening Power during April, 2021 to October, 2021.

II. 156.31 MU Night Peak power estimated at Average IEX rate for Evening Power during April, 2021 to October 2021 less Rs 1.00/kWh.

III. 267.24 MU Off Peak power estimated at Average IEX rate of Day and Morning Power during April 2021 to October 2021 plus Rs 0.50/kWh.

IV. 405.45 MU RTC power estimated at Average IEX rate for RTC during April 2021 to October 2021.

6.4.29 Further, the Petitioner submitted that it is 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 Petitioner 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 through power exchange/banking/ bilateral contracts either by Petitioner directly or through power trading companies to optimize its power purchase cost. Accordingly, the Petitioner has estimated 0.40 % of total power to be sold through exchange / UI.

Power procurement from renewable sources

6.4.30 The Petitioner submitted that, it has executed following renewable power purchase agreements 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 33.92 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 2022-23 but the same cannot be ascertained at present, therefore, the company will consider the same at the time of True-up for FY 2022-23.

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 52.56 MU at tariff of Rs 3.20/ kWh from Tata power w.e.f November 27, 2021 and 53.66 MU at tariff of Rs 3.20/kwh from Adani Solar for FY 2022-23.

vi. 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.

vii. 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.

viii. The Remaining Short-fall of Non-Solar Renewable Power 260.01 MU is estimated to be procured from IEX (RE) at tariff of Rs. 6.64/kWh.

6.4.31 Based on above, the power procurement plan for FY 2022-23 from RE sources is given in the Table as below –

Description	Units (MU) at NPCL	Rate/ kWh	Energy Charges (Rs. Crore)	Trans. Cost (Rs. Crore)	Total cost (Rs. Crore)	Rs./ kWh
GNIDA – Solar	1.58	7.06	1.11	0.00	1.11	7.06
PTC (Wind Power)	33.92	3.53	12.38	0.82	13.20	3.89
Adani – Solar	53.66	3.08	16.53	0.65	17.18	3.20
Tata Power – Solar	52.56	3.08	16.19	0.64	16.82	3.20
Renewable Power (APPCPL LT Solar)	0.59	5.49	0.32	0.00	0.32	5.49
Renewable (Non-Solar)	260.01	5.47	151.88	20.77	172.65	6.64
Total RE Power	**402.31**	**4.71**	**198.41**	**22.87**	**221.29**	**5.50**

6.4.32 Further, estimated status of RPO in accordance with RPO Regulations is provided here-in-below table:

TABLE 6-13: RPO STATUS SUBMITTED BY PETITIONER FOR FY 2022-23 (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	7.64	114.69	146.53	(24.20)
Non-Solar	29.25	137.63	293.93	(127.05)
Hydro Power	44.24	68.81	-	113.06
Total#	81.13	321.13	440.45	(38.19)
* Including gross generation under net-metering arrangements				

6.4.33 Based on the above arrangements, the projected Power Purchase cost for FY 2022-23 is provided in Table herein below for the kind consideration of the Commission:

TABLE 6-14: POWER PURCHASE COST SUBMITTED BY PETITIONER FOR FY 2022-23

Sl. No	Source of Power Purchase	MU	Rs. /kWh	Amount (Rs. Crore)
1	Power Purchase from LT	1192.46	5.98	713.34
2	Power Purchase from MT	486.41	4.98	242.10
3	Power Purchase from Short Term i.e. PXs /Banking/ Bidding etc.	954.55	6.05	577.19
4	Power Purchase from RE	402.31	5.50	221.29
5	Sale of Power/DSM	(12.14)	1	(1.21)
6	**Total Power Purchase Cost**	**3023.59**	**5.80**	**1752.70**

6.4.34 The Petitioner requested the Commission to approve the power purchase plan as provided above for the purpose of determination of ARR for FY 2022-23.

6.4.35 The Petitioner submitted that it is receiving applications from consumers having contract demand > 1 MW seeking Open Access. Currently, 2 nos. of consumers having contract demand of 4.25 MW are taking long term power under Open Access while nine applications of contract demand 21.38 MW are under process.

6.4.36 The Petitioner further submitted that migration of consumers to Open Access may impact the power purchase plan of the Petitioner. The impact of the same will be submitted as per actuals during True-Up.

6.4.37 The Petitioner has revised the power purchase for FY 2022-23. The detail is summarized below:

Revised Petitioner's submission

6.4.38 The Petitioner submitted that at the time of filing the ARR Petition for FY 2022-23, it had tied-up part of its power requirement for FY 2022-23 through LTPPA and MTPPA as well as Long Term Renewable Energy Power Purchase Agreements and remaining power (Peak Demand) through Power Exchanges and Short Term Power Purchase Agreements ("STPPA") as per Ministry of Power's Competitive Bidding Guidelines. In order to manage its load curve & high volatility, the Petitioner floated tenders for Short term power procurement through Deep Portal for the Period April 01, 2022 to October 20, 2022 in different time slots as follows:

a) **Tender for Thermal Power (Petition No – 1819 of 2022)**
    1. *Night Peak Power Slot (00:00-04:00 hrs.),*
    2. *Peak Power Slot (18:00-24:00 hrs.),*
    3. *RTC Power Slot (00:00-24:00 hrs.),*

b) **Tender for Non-Solar Renewable Power (Petition No – 1820 of 2022 & 1845 of 2022)**
    1. *Power Slot (00:00-07:00 hrs & 10:00-24:00 hrs.)*

c) **Tender for Non-Solar Hydro Renewable Power (Petition No – 1818 of 2022)**
    1. *Power Slot (00:00-07:00 hrs & 10:00-24:00 hrs.)*

d) Tender for Thermal Power (Petition No – 1829 of 2022)
    1. *Power Slot (00:00-07:00 hrs & 10:00-24:00 hrs.)*

6.4.39 The Petitioner further submitted that, based on L-1 Bids received in above respective tender, the Petitioner signed Power Purchase Agreements with respective successful bidders and submitted the petitions before the Commission for approval. Accordingly, subsequent to filing of the Captioned Petition, the Commission vide its Orders dated April 01, 2022, April 12, 2022 (two orders of even date), April 21, 2022 and May 17, 2022, in the respective short-term power purchase petitions, has approved following Short Term power purchases for the Petitioner: -

a) <u>Short-Term Thermal Power approved vide order dated 01.04.2022 in Petition No. 1819 of 2022: -</u>

A. Night Power Slot (00:00-04:00 Hrs.):

S. No.	Period	Bidder Name (Source)	Quantum (MW)	Rate at CTU Periphery of Seller (Rs/kWh)
1	01st April 2022 to 30th April 2022	TPTCL (Prayagraj Power Generation Company Limited, Uttar Pradesh (PPGCL))	25	4.03
2		TPTCL (Jindal Power Limited, Chhattisgarh (JPL))	40	4.03
3	01st May 2022 to 31st May 2022	TPTCL (Prayagraj Power Generation Company Limited, Uttar Pradesh (PPGCL))	25	4.64
4		TPTCL (Jindal Power Limited, Chhattisgarh (JPL))	10	4.64
5	01st June 2022 to 31st August 2022	TPTCL (Prayagraj Power Generation Company Limited, Uttar Pradesh (PPGCL))	25	4.68
6		TPTCL (Jindal Power Limited, Chhattisgarh (JPL))	30	4.68
7	01st October 2022 to 20th October 2022	TPTCL (Prayagraj Power Generation Company Limited, Uttar Pradesh (PPGCL))	25	4.78
8		TPTCL (Jindal Power Limited, Chhattisgarh (JPL))	25	4.78

B. RTC Power Slot (00:00-24:00 hrs.):

S. No.	Period	Bidder Name (Source)	Quantum (MW)	Rate at CTU Periphery of Seller (Rs/kWh)

1	01st October 2022 to 20th October 2022	TPTCL (Prayagraj Power Generation Company Limited, Uttar Pradesh (PPGCL))	25	4.86
2		APPCPL (D. B. Power Limited, Chhattisgarh (DBPL))	25	4.86
3		TPTCL (Jindal Power Limited, Chhattisgarh (JPL))	55	4.86

b) <u>Short-Term HPO Power approved vide order dated 12.04.2022 in Petition No. 1818 of 2022: -</u>

S. No.	Bidder Name (Source)	Period	Duration (Hrs.)	Quantum (MW)	Quoted Rate at CTU Periphery of Seller (Rs/kWh)
1	M/s PTC (Singoli Bhatwari HEP, Uttarakhand)	01st May 2022 to 30th June 2022	00:00-07:00 & 10:00-24:00	25	5.20
		01st July 2022 to 31st July 2022		25	5.10
		01st August 2022 to 30th September 2022		25	5.20

c) <u>Short-Term Non-solar Renewable Power approved vide order dated 12.04.2022 in 1820 of 2022: -</u>

S. No.	Bidder Name (Source)	Period	Duration (Hrs.)	Quantum (MW)	Quoted Rate at CTU Periphery of Seller (Rs/kWh)
1	M/s KEIPL (Power Department, Govt. of Sikkim)	01st May 2022 to 31st May 2022	00:00-07:00	25	5.20
			10:00-24:00	25	5.20
		01st June 2022 to 30th June 2022	00:00-07:00	25	5.20
			10:00-24:00	25	5.20

d) <u>Short-Term Non-Solar Renewable Power approved vide order dated 17.05.2022 in Petition No.1845 of 2022: -</u>

S. No.	Bidder Name (Source)	Period	Duration (Hrs.)	Quantum (MW)	Quoted Rate at CTU Periphery of Seller (Rs/kWh)
1	M/s KEIPL (Power Department, Govt. of Sikkim)	01st July 2022 to 31st July 2022	00:00-07:00	25	5.20
			10:00-24:00	25	5.20
		01st August 2022 to 31st August 2022	00:00-07:00	25	5.20
			10:00-24:00	25	5.20
		01st September 2022 to 30th September 2022	00:00-07:00	25	5.20
			10:00-24:00	25	5.20

2	M/s APPCPL (Meghalaya Power Distribution Corporation Limited)	01st July 2022 to 31st July 2022	00:00-07:00	25	5.10
			10:00-24:00	25	5.10

e) **Short-Term Thermal Power approved vide order dated 21.04.2022 in Petition No. 1829 of 2022: -**

S. No.	Period	Bidder Name (Source)	Quantum (MW)	Rate at CTU Periphery of Seller (Rs/kWh)
1	01st April 2022 to 30th April 2022	TPTCL (Prayagraj Power Generation Company Limited, Uttar Pradesh (PPGCL))	80	5.49
2	01st May 2022 to 31st May 2022	APPCPL (Sembcorp Energy India Limited, Andhra Pradesh (SEIL)	20	8.00
3	01st June 2022 to 31st August 2022	APPCPL (Sembcorp Energy India Limited, Andhra Pradesh (SEIL)	25	8.00
4	01st September 2022 to 30th September 2022	APPCPL (Sembcorp Energy India Limited, Andhra Pradesh (SEIL)	15	8.00
5	01st October 2022 to 20th October 2022	TPTCL (Prayagraj Power Generation Company Limited, Uttar Pradesh (PPGCL))	25	5.50

6.4.40 The Petitioner submitted that, it had projected cost of power from short-term sources based on the then prevailing market scenario and the power market rates have risen sharply mainly due to unprecedented rise in power demand on account of early onset of summers coupled with extreme high temperature, shortage of sufficient coal with thermal power plants to meet the sharp rise in power demand and high cost of imported coal due to extraneous reasons. The above stated conditions aggravated the demand coupled with shortage in Generation / Supply and has driven the rates in power market both at power exchange and competitive bidding (Deep Portal) unexpectedly high to the ceiling rate of Rs 20 per unit.

6.4.41 The Petitioner submitted that the rates consistently touched Rs. 20 per kWh on Power Exchanges before the intervention of Hon'ble CERC vide its Order dated April 01, 2022 and May 06, 2022 putting a cap of Rs. 12 per kWh on the platform for sale/purchase of power. The rates of Power Exchanges are still very volatile and erratic and hovering around Rs. 7.00 per kWh for RTC power & Rs. 8.00 per kWh for peak power, excluding transmission charges & losses.

6.4.42 The Petitioner submitted that due to this extraordinary emergency situation, the Central Government also invoked Section 11 of Electricity Act, 2003 directing all the States/Gencos based on domestic coal to blend at least 10% imported coal. Further, the Central Government directed all the idle imported coal based thermal power plants to operate in full capacity with associated power generation cost as pass-through. The arrangement will remain applicable till October 31, 2022.

6.4.43 The Petitioner submitted that, in order to meet the high rising demand of its consumers, it has procured power from power exchange at the prevailing market rates during April-May 2022. Also, various news in India's leading business newspaper have reported that the coal shortages are likely to continue during Monsoon months and may even extend till end of current FY. Therefore, in this aforesaid circumstances, in order to project the power procurement cost for FY 2022-23 accurately, it is very important to revise the short term power rate for the untied power of the Petitioner in accordance with the rates prevailing during March 2022-May 2022. Hence, considering the same, the Petitioner has revised its projections of the rates of short term power which is yet to be procured through power exchange or through subsequent bidding process during FY 2022-23. Further, as explained, above, the Petitioner has tied-up some power for FY 2022-23 through DEEP Portal which has been duly approved by the Commission. Thus, on the aforesaid basis, the Petitioner has prepared the revised Power Procurement Cost for FY 2022-23.

6.4.44 The summary of Power Purchase Cost as estimated for FY 2022-23 is provided below:

Sl. No	Source of Power Purchase	Import (MUs)	Landed Rate (Rs./kWh)	Amount (Rs. Cr.)
1	Power Purchase from LT	1192.46	5.98	713.34
2	Power Purchase from MT	486.41	4.98	242.10
3	Power Purchase from Short Term i.e. PXs / Bidding etc.	896.17	7.92	709.59
4	Power Purchase from RE	402.31	6.15	247.29
5	DSM	46.24	9.94	45.97
6	**Total Power Purchase Cost**	**3023.59**	**6.48**	**1958.29**

6.4.45 The Petitioner requested the Commission to consider the above proposed power purchase cost while approving ARR for FY 2022-23.

Commission's Analysis

6.4.46 The Commission vide deficiency dated December 31, 2021 directed the Petitioner to submit all the approved Orders of each source of power purchased claimed. In response to the Commission's query the Petitioner submitted copies of existing and approved Orders.

Power purchase from long term source

6.4.47 The Commission has observed that the Petitioner has proposed an energy charge rate of Rs. 2.953/unit from DIL. The Commission vide deficiency dated December 31, 2021 directed the Petitioner to provide the justification for such increased energy charge. In response to the Commission's query, the Petitioner submitted that M/s DIL has filled MYT Petition no. 1531 of 2019 for determination of tariff for the Control Period from FY 2019-20 to FY 2023-24 in accordance with UPERC Generation Tariff Regulations 2019 on November 20, 2019. Therefore, License in its ARR Petition has considered the energy charges rate as per DIL's MYT submissions subject to approval of the Commission.

6.4.48 The Commission vide Order dated November 22, 2021 in the matter of determination of Tariff for DIL for FY 2016-17 to FY 2018-19 in Petition No. 1500 of 2019, approved tariff wherein the fixed charges are approved as Rs. 1.92/kWh and Energy Charges are fixed as Rs. 2.177/kWh for FY 2018-19. The relevant extract of the aforesaid Order is quoted below:

Quote

2.5.1 Based on the discussion made above, the true-up ARR and Generation Tariff for the tariff period FY 2016-19 for supply of power from Unit 2 of DIL's Project to NPCL as approved by this Commission is shown as below:

TABLE 23: Summary of Trued-up Annual Revenue Requirement and Generation Tariff for FY 2016-19 (excluding claims due to procurement and use of Additional Coal and Change in Law events)

Particulars	*UoM*	*FY 2016-17*	*FY 2017-18*	*FY 2018-19*

Operationalized Contracted Capacity (Gross)	MW	41	187	187
Normative Auxiliary Power Consumption	%	9.00%	9.00%	9.00%
Normative Annual Power Consumption	%	85.00%	85.00%	85.00%
Operationalized Contracted Capacity (Net)	MW	37	170	170
Generation at NAPAF (85%)	MUs	101.27	1265.82	1265.82
Approved per unit Fixed Charges (MYT order)	**₹ / kWh**	**2.05**	**1.99**	**1.90**
Annual Fixed Charges as approved by the Commission for Operationalized Contracted Capacity for NPCL	₹ Crores	20.76	251.90	240.51
Incremental Annual Fixed Charges for Operationalized Contracted Capacity for NPCL	₹ Crores	0.02	1.58	2.77
Trued-Up Annual Fixed Charges for Operationalized Contracted Capacity for NPCL	**₹ Crores**	**20.78**	**253.48**	**243.28**
Trued-Up ex-bus Fixed Charge Rate at NAPAF	**₹ / kWh**	**2.05**	**2.00**	**1.92**
Scheduled Generation (Ex-bus)	MUs	100.67	1176.26	1175.37
Energy Charges as approved by the Commission @ CERC esc. rate and GCV @4150 Kcal/Kg	**₹ / kWh**	**1.65**	**1.72**	**1.80**
Energy Charges considering application Escalation Indices and actual as Received GCV of Coal	**₹ / kWh**	**1.706**	**1.994**	**2.193**
Energy Charges considering application Escalation Indices and actual as Received GCV of Coal	₹ Crores	17.17	234.49	257.73
Debit/credit claimed /received based on CIMFR report for FSA Grade Coal	**₹ Crores**	**-**	**-0.38**	**-0.26**
Efficiency gain benefit passed on to NPCL	**₹ Crores**	**-**	**-0.95**	**-1.68**
Trued-up ex-bus Energy Charges (excluding claims due to procurement & use of Additional Coal and Change in Law events)	**₹ Cores**	**17.17**	**233.16**	**255.79**
Trued-up ex-bus Energy Charge Rate at Scheduled Generation (excluding claims due to procurement & use of Additional Coal and Change in Law events)	**₹ kWh**	**1.706**	**1.982**	**2.177**
Total Trued-up Annual Revenue Requirement for FY 2016-19 for supply to NPCL (excluding claims due to procurement & use of Additional Coal and Change in Law events)	**₹ Crores**	**37.95**	**486.64**	**499.07**
Trued-up ex-bus Generation Tariff for supply to NPCL	**₹ / kWh**	**3.770**	**4.137**	**4.246**

Unquote

6.4.49 The Commission vide its Suo-Moto Order dated May 30, 2019, decided to extend the applicability of UPERC (Terms and Conditions of Generation Tariff) Regulations, 2014 with effect from April 01, 2019 and ordered that Tariff during FY 2019-20 shall remain as determined by the Commission under UPERC (Terms and Conditions of Generation Tariff) Regulations, 2014 on provisional basis subject to the adjustment with interest.

6.4.50 Further the Commission vide its Order dated May 11, 2020 provided that:

Quote

> *While this being so, due to lockdown caused by outbreak of ongoing Covid-19 pandemic, the Commission is not able to take up matters for hearing. But, as these projects are continuously generating electricity and that the same is being sold to the UPPCL, an Order to continue Status-quo is necessitated for the said electricity being sold to UPPCL. Therefore, it is ordered that Provisional Tariff for next six months from the date of this Order i.e. during the period 1st April'20 to 31st Oct'20 shall remain as determined by the Commission through various orders respective to these existing projects under the UPERC (Terms and Conditions of Generation Tariff) Regulations, 2014 subject to adjustment with applicable interest, if any.*

Unquote

6.4.51 Since, there is no further Order in this regard, the Commission finds it appropriate to consider the rates of fixed and energy charges as determined by the Commission in the aforesaid Order for FY 2018-19. The Commission has considered the ex-bus fixed charges as Rs. 1.92/kWh and ex-bus energy charges as Rs. 2.177/kWh as approved in True-Up Order dated November 22, 2021. Once the True-Up of DIL is approved by the Commission, the impact of True-Up of DIL for the respective year shall be considered. The Inter-State transmission charges are provisionally approved as claimed by the Petitioner, subject to prudence check and truing up. The Petitioner has claimed the Intra-State transmission charge in accordance to the Tariff Order of FY 2021-22, whereas the Commission in Petition No. 1839 of 2022 had approved the transmission tariff for FY 2022-23. Thus, the Intra-State Transmission charge is approved based on the approved transmission tariff for FY 2022-23. Taking into consideration the above rates, the Commission has computed the following long term power purchase:

TABLE 6-15-POWER PURCHASE FROM LONG TERM SOURCE (DIL) FOR FY 2022-23 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	1274.05	3.24%	1232.77	3.27%	1192.46	244.62	277.36	521.98	74.08	29.39	103.47	625.45	5.25

6.4.52 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 2022-23 as shown below:

TABLE 6-16: POWER PURCHASE FROM LONG TERM SOURCE APPROVED BY THE COMMISSION FOR FY 2022-23

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	1274.05	3.24%	1232.77	3.27%	1192.46	234.17	277.36	511.53	74.08	29.39	103.47	615.00	5.16

6.4.53 The Commission for projection of quantum for FY 2022-23 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 2022-23 in Petition No. 1839 of 2021 i.e. 3.27%.

Power Purchase from Medium Term Source

6.4.54 The Commission has observed that the Petitioner has proposed an escalation in the fixed and energy charges of Plants of GoAP, GoN and TPTCL. The Commission vide deficiency dated December 31, 2021 directed the Petitioner to submit the detailed calculation of the escalation of the Fixed and Energy Charges as per the provisions of the PPA. In response to the Commission's query, the Petitioner submitted that while preparing the ARR Petition for FY 2021-22, tariff discovered through Competitive Bidding on Deep Portal and subsequently adopted by the Commission while approving the respective PPA's were considered. However, since clause 11.2 and 12.2 of the PPA also provides for escalation on Fixed and Energy Charges, the Petitioner has accordingly computed the same for the purposes of ARR of FY 2022-

23.

6.4.55 The Commission vide its Order dated February 28, 2020 in Petition No. 1552 of 2020 approved power procurement from Medium Term from two sources such as 50 MW from Department of Power, Govt. of Arunachal Pradesh and 25 MW from Department of Power, Govt. of Nagaland at rate of Rs. 5.46/kWh for a period of April 01, 2020 to March 31, 2023. (https://www.uperc.org/App_File/1552-pdf2282020110421PM.pdf)

6.4.56 The summary of the approval of the above said Order is tabulated below:

Source		**Department of Power, Govt. of Arunanchal Pradesh**	**Department of Power, Government of Nagaland.**
Quantum at NPCL Periphery		a) April-September: 50 MW during 00:00-24:00 Hrs, b) October-November: 25 MW 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: 25 MW 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	1.00	0.99
Cost of Transmission Losses (Rs./kWh)	C	0.28	0.30
Total Tariff at NPCL Bus (Rs./kWh)	D=(A*2)+B+C	5.46	5.46

6.4.57 The Commission has considered the tariffs for the same as approved vide the above said Order dated February 28, 2020. Since, there is no actual financial transaction related to transmission loss, therefore the Commission has considered the transmission loss also in the energy charge i.e. Rs. 2.37/kWh (2.09+0.28) for power procured from Govt. of A.P and energy charges as Rs. 2.385/kWh (2.085+0.30) for power procured from Govt. of Nagaland. The same will be subject to prudence check at the time of truing up. Thus, the Commission has considered the fixed cost, energy charge and transmission charge as Rs. 2.09/kWh, Rs. 2.37/kWh and Rs. 1.00/kWh respectively for power procured from Govt. of Nagaland and Rs. 2.085/kWh, Rs. 2.385/kWh and Rs. 0.99/kWh respectively for power procured from Govt. of Nagaland.

6.4.58 The detail computation is shown in the Table below:

TABLE 6-17: MEDIUM TERM OF 50 MW COMPUTED FOR FY 2022-23 FROM DEPARTMENT OF POWER, GOVT. OF ARUNANCHAL PRADESH

Source	MU at Ex-bus	Inter State Loss (%)	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 (Rs. Unit)
Govt. of AP	209.57	3.24%	3.27%	196.15	41.00	46.49	87.48	19.62		19.62	107.10	5.46

TABLE 6-18: MEDIUM TERM OF 25 MW COMPUTED FOR FY 2022-23 FROM DEPARTMENT OF POWER, GOVT. OF NAGALAND

Source	MU at Ex-bus	Inter State Loss (%)	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 (Rs. Unit)
Govt. of Nagaland	110.28	3.24%	3.27%	103.22	21.52	24.62	46.14	10.22		10.22	56.36	5.46

6.4.59 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 February 28, 2020) for fixed, energy charges and transmission charge, and based on these values, the rate has been approved for FY 2022-23 as shown in the Table below:

TABLE 6-19: MEDIUM TERM OF 50 MW APPROVED FOR FY 2022-23 FROM DEPARTMENT OF POWER, GOVT. OF ARUNACHAL PRADESH

Source	MU at Ex-bus	Inter State Loss (%)	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 (Rs. Unit)
Govt. of AP	209.57	3.24%	3.27%	196.15	41.00	46.49	87.48	11.33	4.84	16.16	103.65	5.28

TABLE 6-20: MEDIUM TERM OF 25 MW APPROVED FOR FY 2022-23 FROM DEPARTMENT OF POWER, GOVT. OF NAGALAND

Source	MU at Ex-bus	Inter State Loss (%)	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
Govt. of Nagaland	110.28	3.24%	3.27%	103.22	21.52	24.62	46.14	5.96	2.54	8.50	54.64	5.29

6.4.60 The Commission vide deficiency dated April 26, 2022 directed the Petitioner to submit the detailed calculation of 149.88 MU and 49.96 MU projected by the Petitioner to be purchased from TPTCL (Source-GoHP) and APPCPL (Source-Goodwill, HP) for FY 2022-23. In response to the Commission’s query, the Petitioner submitted the detailed calculation of 149.88 MU and 49.96 MU projected for power purchased from TPTCL (Source-GoHP) and APPCPL (Source- Goodwill, HP) for FY 2022-23 in Table below:

TABLE 6-21: COMPUTATION OF MEDIUM-TERM POWER QUANTUM FOR FY 2022-23 (DELIVERY PERIOD MAY'22-SEP'23)

S.No	Particulars	Ref. No	TPTCL (Source-GoHP)	APPCPL (Source- Goodwill, HP)
1	Quantum	MW	48.02*	16.01**
2	No of Days	Days	153	153
3	PLF	%	85%	85%
4	No of Hours	Hrs.	24	24
5	**Units at Ex-Bus (Supplier)**	**MU**	**149.88**	**49.96**
6	Inter-State Losses***	%	3.24%	3.24%
7	Units at UP Periphery	MU	145.02	48.34
8	Intra-State Losses	%	3.27%	3.27%
9	**Units at NPCL Bus**	**MU**	**140.28**	**46.76**

Note: - Delivery point of Both MT Power is at NPCL Bus.
*Power Quantum Tied -up for TPTCL (Source- GOHP) is 45 MW at NPCL Bus, so at Ex Bus Power Quantum has been considered as 48.02 MW on RTC basis &
** Power Quantum Tied -up for APPCPL (Source- Goodwill, HP) is 15 MW at NPCL Bus, so at Ex Bus Power Quantum has been considered as 16.01 MW.
*** Projected Inter-State Losses submitted by the Petitioner.

6.4.61 The Commission vide its Order dated May 05, 2021 in Petition No. 1671 of 2021 approved 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		a) May 2021 – September 2021: 15 MW during 00:00-24:00 Hrs b) May-2022 - September 2022: 15 MW during 00:00-24:00 Hrs c) May-2023 - September 2023: 15 MW during 00:00-24:00 Hrs	a) May 2021 – September 2021: 45 MW during 00:00-24:00 Hrs b) May-2022 - September 2022: 45 MW during 00:00-24:00 Hrs c) 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

6.4.62 The Commission has considered the tariffs for the same as approved vide the above said Order dated May 05, 2021. Since, there is no actual financial transaction related to transmission loss, therefore the Commission has considered the transmission loss also in the energy charge i.e. Rs. 1.945/kWh (1.695+0.25) for power procured from Goodwill Energy, H.P and energy charges as Rs. 1.971/kWh (1.661+0.31) for power procured from Govt. of H.P. The same will prudence check at the time of truing up. Thus, the Commission has considered the fixed cost, energy charge and transmission charge as Rs. 1.695/kWh, Rs. 1.945/kWh and Rs. 0.79/kWh respectively for power procured from Goodwill Energy and Rs. 1.6610/kWh, Rs. 1.971/kWh and Rs. 0.7978/kWh respectively for power procured from Govt. of H.P.

6.4.63 The detail computation is shown in the Table below:

TABLE 6-22: MEDIUM TERM OF 15 MW COMPUTED FOR FY 2022-23 FROM GOODWILL ENERGY

Source	MU at Ex-bus	Inter State Loss (%)	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	49.96	3.24%	3.27%	46.76	7.93	9.09	17.02	3.69		3.69	20.71	4.43

TABLE 6-23: MEDIUM TERM OF 45 MW COMPUTED FOR FY 2022-23 FROM TATA POWER TRADING COMPANY LIMITED

Source	MU at Ex-bus	Inter State Loss (%)	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	149.88	3.24%	3.27%	140.28	23.30	27.65	50.95	11.19		11.19	62.14	4.43

6.4.64 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 05, 2021) for fixed, energy charges and transmission charge, and based on these values, the rate has been approved for FY 2022-23 as shown in the Table below:

TABLE 6-24: MEDIUM TERM OF 15 MW COMPUTED FOR FY 2022-23 FROM GOODWILL ENERGY

Source	MU at Ex-bus	Inter State Loss (%)	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	49.96	3.24%	3.27%	46.76	7.93	9.09	17.02	3.69		3.69	20.71	4.43

TABLE 6-25: MEDIUM TERM OF 45 MW COMPUTED FOR FY 2022-23 FROM TATA POWER TRADING COMPANY LIMITED

Source	MU at Ex-bus	Inter State Loss (%)	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	149.88	3.24%	3.27%	140.28	22.68	27.65	50.33	11.19		11.19	61.52	4.39

6.4.65 The Commission for projection of quantum (MU) for FY 2022-23 has considered 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 2022-23 i.e., 3.27%.

6.4.66 Accordingly, the medium-term power purchase approved by the Commission for FY 2022-23 is as under:

TABLE 6-26: MEDIUM TERM POWER PURCHASE APPROVED FOR FY 2022-23

Source	MU at Ex-bus	Inter State Loss (%)	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 (Rs. Unit)
Government of AP. Medium term	209.57	3.24%	3.27%	196.15	41.00	46.49	87.48	11.33	4.84	16.16	103.65	5.28
Government of Nagaland. Medium term	110.28	3.24%	3.27%	103.22	21.52	24.62	46.14	5.96	2.54	8.50	54.64	5.29
Goodwill Energy, APPCL	49.96	3.24%	3.27%	46.76	7.93	9.09	17.02	3.69	2.54	1.15	20.71	4.43
TPTCL, Govt. of Himachal Pradesh	149.88	3.24%	3.27%	140.28	22.68	27.65	50.33	11.19	7.73	3.46	61.52	4.39

Power Purchase from Renewable Source

6.4.67 The Commission vide deficiency dated April 26, 2022 directed the Petitioner to submit the detailed calculation of 53.66 MU and 52.56 MU projected by the Petitioner to be purchased from Solar Power (Adani Solar ECOL) and Solar Power (Tata Power) for FY 2022-23. In response to the Commission’s query, the Petitioner submitted the detailed calculation of 53.66 MU and 52.56 MU projected for power purchased from Solar Power (Adani Solar ECOL) and Solar Power (Tata Power) for FY 2022-23 in Table below:

TABLE 6-27: COMPUTATION OF SOLAR POWER QUANTUM FOR FY 2022-23

S. No	Particulars	Ref. No.	Adani Solar ECOL	Tata Power
1	Tied-up Quantum	MW	25	25
2	No of Days	Days	365	365
3	CUF	%	24.50%	24.00%
4	No of Hours	Hrs	24	24
5	**Units**	**MU**	**53.66**	**52.56**

6.4.68 As regards purchase of power from renewable sources, the Commission observed that the licensee has submitted to procure 1 MW solar power from GNIDA, 10 MW wind power through PTC and Solar Power through Adani Power. The Commission vide its Order dated July 14, 2015 approved rate of Rs. 7.06/kWh for power procurement of solar PV power from GNIDA for 10 years (Petition No. 1012 of 2015). Also, 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). Further the Commission vide order dated September 18, 2019 approved rate of Rs. 3.08/kWh for Power Purchase from Adani and Tata Solar Power plant (Petition No. 1479 of 2019).

6.4.69 In addition to above, the Commission had also approved the following short-term power purchases:

<u>Short-Term HPO Power approved vide order dated 12.04.2022 in Petition No. 1818 of 2022: -</u>

S. No.	Bidder Name (Source)	Period	Duration (Hrs.)	Quantum (MW)	Quoted Rate at CTU Periphery of Seller (Rs/kWh)
1	M/s PTC (Singoli Bhatwari HEP, Uttarakhand)	01st May 2022 to 30th June 2022	00:00-07:00 & 10:00-24:00	25	5.20
		01st July 2022 to 31st July 2022		25	5.10
		01st August 2022 to 30th September 2022		25	5.20

Short-Term Non-solar Renewable Power approved vide order dated 12.04.2022 in 1820 of 2022: -

S. No.	Bidder Name (Source)	Period	Duration (Hrs.)	Quantum (MW)	Quoted Rate at CTU Periphery of Seller (Rs/kWh)
1	M/s KEIPL (Power Department, Govt. of Sikkim)	01st May 2022 to 31st May 2022	00:00-07:00	25	5.20
			10:00-24:00	25	5.20
		01st June 2022 to 30th June 2022	00:00-07:00	25	5.20
			10:00-24:00	25	5.20

Short-Term Non-Solar Renewable Power approved vide order dated 17.05.2022 in Petition No.1845 of 2022: -

S. No.	Bidder Name (Source)	Period	Duration (Hrs.)	Quantum (MW)	Quoted Rate at CTU Periphery of Seller (Rs/kWh)
1	M/s KEIPL (Power Department, Govt. of Sikkim)	01st July 2022 to 31st July 2022	00:00-07:00	25	5.20
			10:00-24:00	25	5.20
		01st August 2022 to 31st August 2022	00:00-07:00	25	5.20
			10:00-24:00	25	5.20
		01st September 2022 to 30th September 2022	00:00-07:00	25	5.20
			10:00-24:00	25	5.20
2	M/s APPCPL (Meghalaya Power Distribution Corporation Limited)	01st July 2022 to 31st July 2022	00:00-07:00	25	5.10
			10:00-24:00	25	5.10

6.4.70 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 6-28: RPO COMPUTATION FOR FY 2022-23

S. No.	Particular	Reference	Quantum (MU)
1	Total Ex-Bus Energy	**A**	**3211.82**
2	Hydro Purchase during the year	B	519.69
3	**Net Power Sale for RPO computation**	C=A-B	2692.12
4	**Total Obligation for the year (%)**		
5	Solar (%)	D	5%
6	Non Solar (%)	E	6%
7	HPO Obligation for the year (%)	F	3%
8	**Total Obligation for year**		
9	Solar (MU)	G=D*C	134.61
10	Non Solar (MU)	H=E*C	161.53
11	HPO Obligation for the year (MU)	I=F*C	80.76
12	**Total Obligation for the year(MU)**	**J=G+H+I**	**376.90**

S. No.	Particular	Reference	Quantum (MU)
13	**Total RPO Fulfilled during the year**		
14	Solar	k	107.79
15	Non Solar	L	236.25
16	Hydro	M	80.33
17	**Total RPO to be fulfilled**	N=K+L+M	**424.37**
18	Balance Obligation to be fulfilled in FY 2022-23	**O=P+Q+R**	**(47.47)**
19	Solar	P	26.81
20	Non Solar	Q	(74.73)
21	Hydro	R	0.44

6.4.71 The Commission has considered that the Petitioner should fulfill its complete RPO obligation for FY 2022-23. Accordingly, apart from the RPO obligation being met during the year by the Petitioner, the Commission has considered that the remaining shortfall of non-solar and solar RPO obligation are to be fulfilled through the GTAM market. The Commission has computed the RPO details as under:

TABLE 6-29: STATUS OF RPO TO BE MET DURING FY 2022-23

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	110.94	134.61	107.79	137.76	137.76	0.00	0.00
Non-Solar	59.66	161.53	236.25	(15.09)	44.15	(59.20)	0.00
HPO	58.77	80.76	80.33	59.21	-	59.20	0.00
Total	**229.38**	**376.90**	**424.37**	**181.90**	**181.90**	**0.00**	**0.00**

6.4.72 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

6.4.73 In light of the above, the Commission has not allowed any Inter-State transmission charges for renewable power procurement through GTAM and GDAM market.

6.4.74 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

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

6.4.75 In light of the above Regulations, the Commission has considered the Intra-State transmission charge as 50% of the approved value for FY 2022-23 for solar consumption and 100% exemption for Inter-State sale of solar power.

6.4.76 The remaining power purchased from non-solar and solar power, considered to be fulfilled through the GTAM market and the GTAM Rates have been arrived at by consolidating the daily transactions from April 2021 to March 2022 (FY 2021-22) where the solar rates arrived at Rs. 3.85/kWh and Non-Solar Rates are arrived at 4.69/kWh and the same are considered respectively for the approval. Further, inter-state losses have been considered as 3.24% for short term purchase from exchange. For intra-state, the UPPTCL Transmission losses and charges as approved in the Tariff Order FY 2022-23 is considered for computing the cost at NPCL Periphery.

6.4.77 The Power purchase from renewable sources approve for FY 2022-23 is as under:

TABLE 6-30: APPROVED RENEWABLE ENERGY FOR FY 2022-23

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
Solar Power (GNIDA)	1.58	0.00%	0.00%	1.58	0.00	1.11	1.11	0.00	0.00	0.00	1.11	7.06
Solar Power (Adani Solar ECOL)	53.66	0.00%	3.27%	51.90	0.00	15.99	15.99	0.00	0.64	0.64	16.63	3.20
Solar Power (Tata Power)	52.56	0.00%	3.27%	50.84	0.00	15.66	15.66	0.00	0.63	0.63	16.29	3.20
Wind Power (PTC)	35.07	0.00%	3.27%	33.92	0.00	12.38	12.38	0.00	0.84	0.84	13.21	3.90
Non-Solar (Power Exchange GTAM)	104.59	3.24%	3.27%	97.89	0.00	49.05	49.05	0.00	2.41	2.41	51.46	5.26
KEIPL Non-Solar (Power Department, Govt. of Sikkim)	80.33	3.24%	3.27%	75.18	0.00	41.77	41.77	0.00	1.85	1.85	43.62	5.80
APPCPL Non-Solar (Source-MePDCL)	16.28	3.24%	3.27%	15.23	0.00	8.30	8.30	0.00	0.38	0.38	8.68	5.70
PTC Hydro Power (SB-HEP, Uttarakhand)	80.33	3.24%	3.27%	75.18	0.00	41.61	41.61	0.00	1.85	1.85	43.46	5.78
Non-Solar (IEX GTAM)	47.17	3.24%	3.27%	44.15	0.00	22.12	22.12	0.00	1.09	1.09	23.21	5.26
Solar (IEX GTAM)	147.18	3.24%	3.27%	137.76	0.00	56.67	56.67	0.00	0.00	0.00	56.67	4.11
Total	**618.72**	**-**	**-**	**583.62**	**0.00**	**264.65**	**264.65**	**0.00**	**9.68**	**9.68**	**274.33**	**4.70**

Power Purchase from Short-Term Source

6.4.78 The Commission has considered the following orders of the approved sources for procurement of power from short-term for FY 2022-23. The detail of the approved Orders are as shown below:

Commission Order dated 01.04.2022 in Petition No. 1819 of 2022: -

Night Power Slot (00:00-04:00 Hrs.):

S. No.	Period	Bidder Name (Source)	Quantum (MW)	Rate at CTU Periphery of Seller (Rs/kWh)
1	01st April 2022 to 30th April 2022	TPTCL (Prayagraj Power Generation Company Limited, Uttar Pradesh (PPGCL))	25	4.03
2		TPTCL (Jindal Power Limited, Chhattisgarh (JPL))	40	4.03
3	01st May 2022 to 31st May 2022	TPTCL (Prayagraj Power Generation Company Limited, Uttar Pradesh (PPGCL))	25	4.64
4		TPTCL (Jindal Power Limited, Chhattisgarh (JPL))	10	4.64
5	01st June 2022 to 31st August 2022	TPTCL (Prayagraj Power Generation Company Limited, Uttar Pradesh (PPGCL))	25	4.68
6		TPTCL (Jindal Power Limited, Chhattisgarh (JPL))	30	4.68
7	01st October 2022 to 20th October 2022	TPTCL (Prayagraj Power Generation Company Limited, Uttar Pradesh (PPGCL))	25	4.78
8		TPTCL (Jindal Power Limited, Chhattisgarh (JPL))	25	4.78

RTC Power Slot (00:00-24:00 hrs.):

S. No.	Period	Bidder Name (Source)	Quantum (MW)	Rate at CTU Periphery of Seller (Rs/kWh)
1	01st October 2022 to 20th October 2022	TPTCL (Prayagraj Power Generation Company Limited, Uttar Pradesh (PPGCL))	25	4.86
2		APPCPL (D. B. Power Limited, Chhattisgarh (DBPL))	25	4.86
3		TPTCL (Jindal Power Limited, Chhattisgarh (JPL))	55	4.86

Commission Order dated 21.04.2022 in Petition No. 1829 of 2022: -

S. No.	Period	Bidder Name (Source)	Quantum (MW)	Rate at CTU Periphery of Seller (Rs/kWh)
1	01st April 2022 to 30th April 2022	TPTCL (Prayagraj Power Generation Company Limited, Uttar Pradesh (PPGCL))	80	5.49
2	01st May 2022 to 31st May 2022	APPCPL (Sembcorp Energy India Limited, Andhra Pradesh (SEIL)	20	8.00
3	01st June 2022 to 31st August 2022	APPCPL (Sembcorp Energy India Limited, Andhra Pradesh (SEIL)	25	8.00
4	01st September 2022 to 30th September 2022	APPCPL (Sembcorp Energy India Limited, Andhra Pradesh (SEIL)	15	8.00
5	01st October 2022 to 20th October 2022	TPTCL (Prayagraj Power Generation Company Limited, Uttar Pradesh (PPGCL))	25	5.50

6.4.79 The Commission has considered the rate as approved in the above approved Orders of the Commission for allowing the power purchase from the approved source.

6.4.80 Based on the above, the short term power procured from the approved sources is tabulated below:

TABLE 6-31: POWER PURCHASE FROM APPROVED SHORT TERM SOURCES APPROVED BY THE COMMISSION FOR FY 2022-23

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
Approved sources												
TPTCL (Source-PPGCL, Uttar Pradesh)-(Night-Peak)	17.30	0.00%	3.27%	16.73	0.00	7.91	7.91	0.00	0.41	0.41	8.32	4.97
TPTCL (Source-JPL,Chhattisgarh)-(Night-Peak)	19.08	3.24%	3.27%	17.86	0.00	8.63	8.63	0.99	0.44	1.43	10.07	5.64
TPTCL (Source-JPL,Chhattisgarh)-RTC	26.40	3.24%	3.27%	24.71	0.00	12.83	12.83	1.33	0.61	1.94	14.77	5.98
TPTCL (Source-PPGCL, Uttar Pradesh)-RTC	12.00	0.00%	3.27%	11.61	0.00	5.83	5.83	0.00	0.29	0.29	6.12	5.27
APPCPL (Source-DB Power, Chhattisgarh)-RTC	12.00	3.24%	3.27%	11.23	0.00	5.83	5.83	0.61	0.28	0.88	6.71	5.98
TPTCL (Source-PPGCL, Uttar Pradesh)-Peak	17.40	0.00%	3.27%	16.83	0.00	9.56	9.56	0.00	0.41	0.41	9.97	5.92

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-Sembcorp)-Peak	11.01	3.24%	3.27%	10.30	0.00	8.81	8.81	0.57	0.25	0.83	9.63	9.35

6.4.81 The balance requirement has been considered to be met from power exchange. Thus, the Commission has considered the balance power requirement in the same proportion as projected by the Petitioner. In regard to rate, the Commission has considered the average prices for FY 2021-22 for the respective time slots as shown below:

TABLE 6-32: EXCHANGE PRICE FOR FY 2021-22

Summary	N2 Rate (Rs./kWh)
RTC	4.398
Evening	5.778
Day	3.597
Night	3.857
Morning	4.675

6.4.82 The Commission has considered the above rate to approve the balance power requirement for FY 2022-23. The power purchase from short-term sources approved by the Commission is as shown in the Table below:

TABLE 6-33: POWER PURCHASE FROM SHORT TERM SOURCES APPROVED BY THE COMMISSION FOR FY 2022-23

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
Power Exchange												
Inter State Power (Peak)	55.19	3.24%	3.27%	51.66	0.00	31.89	30.45	2.65	1.27	3.793	35.81	6.93
Inter State Power (Night-Peak)	41.80	3.24%	3.27%	39.12	0.00	16.12	15.39	2.01	0.96	2.97	19.09	4.88
Inter State Power (Off-Peak)	237.14	3.24%	3.27%	221.95	0.00	85.30	81.44	11.40	5.47	16.87	102.16	4.60
Inter State Power (RTC)	350.04	3.24%	3.27%	327.63	0.00	153.95	146.99	16.82	8.08	24.90	178.85	5.46
Approved sources												
TPTCL (Source-PPGCL, Uttar Pradesh)-(Night-Peak)	17.30	0.00%	3.27%	16.73	0.00	7.91	7.91	0.00	0.41	0.41	8.32	4.97
TPTCL (Source-JPL,Chhattisgarh)-(Night-Peak)	19.08	3.24%	3.27%	17.86	0.00	8.63	8.63	0.99	0.44	1.43	10.07	5.64

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
TPTCL (Source-JPL,Chhattisgarh)-RTC	26.40	3.24%	3.27%	24.71	0.00	12.83	12.83	1.33	0.61	1.94	14.77	5.98
TPTCL (Source-PPGCL, Uttar Pradesh)-RTC	12.00	0.00%	3.27%	11.61	0.00	5.83	5.83	0.00	0.29	0.29	6.12	5.27
APPCPL (Source-DB Power, Chhattisgarh)-RTC	12.00	3.24%	3.27%	11.23	0.00	5.83	5.83	0.61	0.28	0.88	6.71	5.98
TPTCL (Source-PPGCL, Uttar Pradesh)-Peak	17.40	0.00%	3.27%	16.83	0.00	9.56	9.56	0.00	0.41	0.41	9.97	5.92
APPCPL (Source-Sembcorp)-Peak	11.01	3.24%	3.27%	10.30	0.00	8.81	8.81	0.57	0.25	0.83	9.63	9.35
Total	**799.36**	-	-	**749.63**	**0.00**	**346.66**	**346.66**	**36.38**	**18.48**	**54.85**	**401.51**	**5.36**

6.4.83 The Commission while computing the Intra- State transmission charges for FY 2022-23 has considered the transmission tariff of Rs 0.2465/ kWh and transmission losses of 3.27% for FY 2022-23 as approved by the Commission vide Tariff Order of UPPTCL for FY 2022-23.

6.4.84 The Commission will carry out the detailed analysis of actual power purchase, transmission loss & transmission charges at the time of truing up of FY 2022-23. Accordingly, the power purchase quantum and cost as approved by the Commission for FY 2022-23 and as projected by the Petitioner is shown below: -

TABLE 6-34: APPROVED POWER PURCHASE FOR FY 2022-23

Particular	Petition			Approved for FY 2022-23					
Sources of Power Purchase	Energy (MU) at NPCL bus	Avg. cost (Rs. /kWh)	Cost excluding Transmission (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 (from DIL)	**1192.46**	**5.98**	**610.40**	**1192.46**	**5.16**	**511.53**	**74.08**	**29.39**	**615.00**
Medium Term MTPPA (PTC India Ltd)									
TPTCL (Source-G.o.HP)	140.28	4.46	50.44	140.31	4.39	50.33	7.73	3.46	61.52
APPCPL (Source- Goodwill, HP)	46.76	4.50	17.03	46.77	4.43	17.02	2.54	1.15	20.71
APPCPL (Source- D.o.P, Govt of AP)	196.15	5.29	87.66	196.19	5.28	87.48	11.33	4.84	103.65
APPCPL (Source- D.o.P, Govt of Nagaland)	103.22	5.30	46.23	103.24	5.29	46.14	5.96	2.54	54.64
Short-Term Power Purchase (Exchange)									
Inter State Power (Peak) {Evening Peak}	63.48	11.14	65.57	51.66	6.93	31.89	2.65	1.27	35.81
Inter State Power (Night-Peak) {Night Peak}	48.07	10.43	46.20	39.12	4.88	16.12	2.01	0.96	19.09
Inter State Power (Off-Peak) {Day}	272.74	7.29	177.01	221.95	4.60	85.30	11.40	5.47	102.16

Particular	Petition			Approved for FY 2022-23					
Sources of Power Purchase	**Energy (MU) at NPCL bus**	**Avg. cost (Rs. /kWh)**	**Cost excluding Transmission (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)**
Inter State Power (RTC)	402.60	8.05	292.07	327.63	5.46	153.95	16.82	8.08	178.85
Short-Term Power Purchase (Competitive Bidding)									
TPTCL (Source-PPGCL, Uttar Pradesh)-(Night-Peak)	16.73	5.00	7.91	16.73	4.97	7.91	0.00	0.41	8.32
TPTCL (Source-JPL,Chhattisgarh)-(Night-Peak)	17.86	5.66	8.63	17.86	5.64	8.63	0.99	0.44	10.07
TPTCL (Source-JPL,Chhattisgarh)-RTC	24.71	5.99	12.83	24.71	5.98	12.83	1.33	0.61	14.77
TPTCL (Source-PPGCL, Uttar Pradesh)-RTC	11.61	5.28	5.83	11.61	5.27	5.83	0.00	0.29	6.12
APPCPL (Source-DB Power, Chhattisgarh)-RTC	11.23	5.99	5.83	11.23	5.98	5.83	0.61	0.28	6.71
TPTCL (Source-PPGCL, Uttar Pradesh)-Peak	16.83	5.93	9.56	16.83	5.92	9.56	0.00	0.41	9.97
APPCPL (Source-Sembcorp)-Peak	10.30	9.37	8.81	10.30	9.35	8.81	0.57	0.25	9.63
Power Purchase from RE									
Solar Power (APPCPL)	0.59	5.49	0.32	0.00	-	0.00	0.00	0.00	0.00
Solar Power (GNIDA)	1.58	7.06	1.11	1.58	7.06	1.11	0.00	0.00	1.11
Solar Power (Adani Solar ECOL)	51.90	3.31	16.53	51.90	3.20	15.99	0.00	0.64	16.63
Solar Power (Tata Power)	50.84	3.31	16.19	50.84	3.20	15.66	0.00	0.63	16.29
Wind Power (PTC)	33.92	3.89	12.38	33.92	3.90	12.38	0.00	0.84	13.21
Non-Solar (Power Exchange GTAM)	97.89	9.58	85.86	97.89	5.26	49.05	0.00	2.41	51.46
KEIPL Non-Solar (Power Department, Govt. of Sikkim)	75.18	6.36	41.77	75.18	5.80	41.77	0.00	1.85	43.62
APPCPL Non-Solar (Source-MePDCL)	15.23	6.25	8.30	15.23	5.70	8.30	0.00	0.38	8.68
PTC Hydro Power (SB-HEP, Uttarakhand)	75.18	6.33	41.61	75.18	5.78	41.61	0.00	1.85	43.46
Non-Solar (IEX GTAM)	-	-	-	44.15	5.26	22.12	0.00	1.09	23.21
Solar (IEX GTAM)	-	-	-	137.76	4.11	56.67	0.00	0.00	56.67
Subtotal	**2977.35**	**6.42**	**1676.08**	**3012.12**	**5.08**	**1323.80**	**138.01**	**69.55**	**1531.36**
UI	**46.24**	9.94	**45.97**	0.00		0.00			
Sub-total	**2977.35**	**6.48**	**1722.05**	**3012.12**	**5.08**	**1323.80**	**138.01**	**69.55**	**1531.36**
Total Transmission Charges									
Transmission Charges of PGCIL			163.23			138.01			
Transmission Charges of UPPTCL			73.00			69.55			
Total Power Purchase Cost	**3023.59**	**6.48**	**1958.29**	**3012.02**	**5.08**	**1531.36**			

6.4.85 The Petitioner submitted the month wise power purchase cost as under:

TABLE 6-35: MONTH WISE POWER PURCHASE AS SUBMITTED BY THE PETITIONER FOR FY 2022-23

Month	Sales	Power Purchase (Over-All)						
	MU	**Type**	**MU at Ex-Bus**	**MU at NPCL**	**FC**	**VC**	**Others**	**Total**
April	216.37	Long Term	115.80	108.39	19.25	34.20	8.80	62.24
		Medium Term	48.83	45.71	9.59	10.86	3.81	24.25

Month	Sales	Power Purchase (Over-All)						
		Short Term	79.21	75.19	-	73.71	4.47	78.18
		RE-Solar (A)	8.91	8.62	-	2.81	0.10	2.91
		RE-Non-Solar (B)	10.08	9.53	-	9.98	0.61	10.59
		RE (A+B)	18.99	18.15	-	12.79	0.71	13.50
		Total	**262.83**	**247.43**	**28.83**	**131.55**	**17.80**	**178.18**
May	246.10	Long Term	119.66	112.00	19.89	35.34	8.88	64.11
		Medium Term	90.95	85.13	16.11	18.68	7.08	41.87
		Short Term	46.00	43.47	-	43.20	2.96	46.16
		RE-Solar (A)	9.20	8.91	-	2.90	0.11	3.01
		RE-Non-Solar (B)	42.97	40.31	-	24.81	3.07	27.88
		RE (A+B)	52.17	49.22	-	27.71	3.18	30.89
		Total	**308.79**	**289.82**	**36.00**	**124.93**	**22.10**	**183.02**
June	263.15	Long Term	113.55	106.27	19.25	33.53	8.75	61.52
		Medium Term	88.02	82.38	15.58	18.08	7.01	40.68
		Short Term	62.57	58.91	-	41.48	4.27	45.75
		RE-Solar (A)	8.91	8.62	-	2.81	0.10	2.91
		RE-Non-Solar (B)	45.33	42.52	-	25.93	3.25	29.18
		RE (A+B)	54.24	51.14	-	28.73	3.35	32.09
		Total	**318.37**	**298.71**	**34.83**	**121.82**	**23.38**	**180.03**
July	254.68	Long Term	114.57	107.23	19.89	33.83	8.77	62.49
		Medium Term	90.95	85.13	16.11	18.68	7.08	41.87
		Short Term	30.25	28.61	-	19.94	1.92	21.86
		RE-Solar (A)	9.20	8.91	-	2.90	0.11	3.01
		RE-Non-Solar (B)	63.12	59.17	-	34.93	4.58	39.51
		RE (A+B)	72.32	68.08	-	37.83	4.69	42.51
		Total	**308.09**	**289.05**	**36.00**	**110.29**	**22.45**	**168.74**
August	259.93	Long Term	112.03	104.85	19.89	33.08	8.71	61.68
		Medium Term	90.95	85.13	16.11	18.68	7.08	41.87
		Short Term	61.97	58.30	-	41.26	4.27	45.53
		RE-Solar (A)	9.20	8.91	-	2.90	0.11	3.01
		RE-Non-Solar (B)	46.84	43.93	-	26.79	3.36	30.15
		RE (A+B)	56.05	52.84	-	29.69	3.47	33.16
		Total	**320.99**	**301.13**	**36.00**	**122.72**	**23.52**	**182.24**
September	263.94	Long Term	110.88	103.78	19.25	32.74	8.69	60.67
		Medium Term	88.02	82.38	15.58	18.08	7.01	40.68
		Short Term	52.86	49.68	-	36.95	3.73	40.68
		RE-Solar (A)	8.91	8.62	-	2.81	0.10	2.91
		RE-Non-Solar (B)	45.33	42.52	-	25.93	3.25	29.18
		RE (A+B)	54.24	51.14	-	28.73	3.35	32.09
		Total	**305.99**	**286.98**	**34.83**	**116.51**	**22.78**	**174.12**
October	242.40	Long Term	112.03	104.85	19.89	33.08	8.71	61.68
		Medium Term	5.61	5.25	1.10	1.25	0.42	2.77

Month	Sales	Power Purchase (Over-All)						
		Short Term	137.95	129.86	-	80.27	9.24	89.51
		RE-Solar (A)	9.20	8.91	-	2.90	0.11	3.01
		RE-Non-Solar (B)	10.72	10.12	-	7.08	0.66	7.73
		RE (A+B)	19.92	19.03	-	9.98	0.76	10.74
		Total	**275.51**	**258.99**	**20.99**	**124.58**	**19.13**	**164.70**
November	203.24	Long Term	48.05	44.97	19.25	14.19	7.26	40.70
		Medium Term	5.43	5.08	1.06	1.21	0.41	2.68
		Short Term	152.39	142.84	-	99.52	11.12	110.65
		RE-Solar (A)	8.91	8.62	-	2.81	0.10	2.91
		RE-Non-Solar (B)	10.37	9.80	-	6.85	0.63	7.48
		RE (A+B)	19.28	18.42	-	9.66	0.74	10.39
		Total	**225.14**	**211.30**	**20.31**	**124.58**	**19.53**	**164.42**
December	198.65	Long Term	109.48	102.47	19.89	32.33	8.65	60.87
		Medium Term	2.80	2.62	0.55	0.62	0.22	1.39
		Short Term	84.98	79.75	-	55.80	6.12	61.91
		RE-Solar (A)	9.20	8.91	-	2.90	0.11	3.01
		RE-Non-Solar (B)	10.72	10.12	-	7.08	0.66	7.73
		RE (A+B)	19.92	19.03	-	9.98	0.76	10.74
		Total	**217.18**	**203.87**	**20.44**	**98.73**	**15.75**	**134.92**
January	212.19	Long Term	108.58	101.62	19.89	32.06	8.63	60.58
		Medium Term	2.80	2.62	0.55	0.62	0.22	1.39
		Short Term	102.07	95.74	-	67.89	7.39	75.27
		RE-Solar (A)	9.20	8.91	-	2.90	0.11	3.01
		RE-Non-Solar (B)	10.72	10.12	-	7.08	0.66	7.73
		RE (A+B)	19.92	19.03	-	9.98	0.76	10.74
		Total	**233.37**	**219.02**	**20.44**	**110.55**	**17.00**	**147.99**
February	215.56	Long Term	98.89	92.55	17.96	29.20	8.41	55.58
		Medium Term	2.53	2.37	0.50	0.56	0.20	1.26
		Short Term	109.61	102.80	-	72.08	7.94	80.02
		RE-Solar (A)	8.31	8.05	-	2.62	0.10	2.72
		RE-Non-Solar (B)	9.68	9.14	-	6.39	0.59	6.99
		RE (A+B)	17.99	17.19	-	9.01	0.69	9.70
		Total	**229.02**	**214.91**	**18.46**	**110.85**	**17.24**	**146.56**
March	204.00	Long Term	110.55	103.47	19.89	32.64	8.68	61.21
		Medium Term	2.80	2.62	0.55	0.62	0.22	1.39
		Short Term	82.30	77.24	-	54.13	5.92	60.05
		RE-Solar (A)	9.20	8.91	-	2.90	0.11	3.01
		RE-Non-Solar (B)	10.72	10.12	-	7.08	0.66	7.73
		RE (A+B)	19.92	19.03	-	9.98	0.76	10.74
		Total	**215.57**	**202.36**	**20.44**	**97.38**	**15.57**	**133.39**
Total	**2,780.19**	**Long Term**	**1,274.05**	**1,192.46**	**234.17**	**376.23**	**102.94**	**713.34**
		Medium Term	**519.69**	**486.41**	**93.39**	**107.96**	**40.74**	**242.10**

Month	Sales	Power Purchase (Over-All)						
		Short Term	**1,002.16**	**942.41**	**-**	**686.23**	**69.33**	**755.57**
		RE-Solar (A)	**108.38**	**104.91**	**-**	**34.15**	**1.24**	**35.39**
		RE-Non-Solar (B)	**316.58**	**297.40**	**-**	**189.92**	**21.98**	**211.89**
		RE (A+B)	**424.96**	**402.31**	**-**	**224.07**	**23.22**	**247.29**
		Total	**3,220.86**	**3,023.59**	**327.56**	**1,394.49**	**236.24**	**1,958.29**

6.4.86 It is observed that the Petitioner has not submitted the reply in the prescribed format whereby the power purchase to be covered under IC Mechanism is missing. Hence, it is not clear in the below given appropriation table as to what sources will be covered under the IC Mechanism. However, for the purpose of this Order, the month-wise power purchase has been recomputed by the Commission in the same proportion submitted by the Petitioner for FY 2022-23 as under:

TABLE 6-36: APPROPRIATION OF APPROVED POWER PURCHASE FOR FY 2022-23

Months	Sales	Power Purchase (Over-All)						
	MU	Type	MU at Ex-Bus	MU at NPCL	FC	VC	Others	Total
April	216.37	Long Term	105.41	98.66	19.37	22.95	8.56	50.88
		Medium Term	48.83	45.71	8.75	10.13	3.72	22.60
		Short Term	63.18	59.25	-	27.40	4.34	31.73
		RE-Solar (A)	20.96	19.90	-	7.35	0.10	7.45
		RE-Non-Solar (B)	11.58	10.88	-	5.58	0.27	5.85
		RE (A+B)	32.54	30.77	-	12.93	0.37	13.30
		Total	**249.96**	**234.42**	**28.12**	**73.41**	**16.98**	**118.52**
May	246.10	Long Term	85.64	80.15	15.74	18.64	6.95	41.34
		Medium Term	90.95	85.13	16.30	18.87	6.92	42.09
		Short Term	36.69	34.41	-	15.91	2.52	18.43
		RE-Solar (A)	21.66	20.56	-	7.59	0.11	7.70
		RE-Non-Solar (B)	49.37	46.36	-	23.78	1.14	24.93
		RE (A+B)	71.03	66.92	-	31.38	1.25	32.63
		Total	**284.31**	**266.63**	**32.04**	**84.81**	**17.64**	**134.49**
June	263.15	Long Term	93.04	87.08	17.10	20.25	7.56	44.91
		Medium Term	88.02	82.38	15.77	18.27	6.70	40.73
		Short Term	49.91	46.80	-	21.64	3.42	25.07
		RE-Solar (A)	20.96	19.90	-	7.35	0.10	7.45
		RE-Non-Solar (B)	52.08	48.91	-	25.09	1.21	26.30
		RE (A+B)	73.04	68.80	-	32.44	1.31	33.75
		Total	**304.00**	**285.10**	**32.87**	**92.60**	**18.99**	**144.46**
July	254.68	Long Term	84.97	79.52	15.62	18.50	6.90	41.01
		Medium Term	90.95	85.13	16.30	18.87	6.92	42.09
		Short Term	24.13	22.62	-	10.46	1.66	12.12
		RE-Solar (A)	21.66	20.56	-	7.59	0.11	7.70
		RE-Non-Solar (B)	72.52	68.09	-	34.93	1.68	36.61
		RE (A+B)	94.17	88.65	-	42.53	1.79	44.32
		Total	**294.22**	**275.92**	**31.91**	**90.36**	**17.26**	**139.54**

Months	**Sales**	**Power Purchase (Over-All)**						
	MU	**Type**	**MU at Ex-Bus**	**MU at NPCL**	**FC**	**VC**	**Others**	**Total**
August	259.93	Long Term	84.44	79.03	15.52	18.38	6.86	40.76
		Medium Term	90.95	85.13	16.30	18.87	6.92	42.09
		Short Term	49.43	46.35	-	21.44	3.39	24.83
		RE-Solar (A)	21.66	20.56	-	7.59	0.11	7.70
		RE-Non-Solar (B)	53.82	50.54	-	25.93	1.25	27.17
		RE (A+B)	75.47	71.10	-	33.52	1.35	34.87
		Total	**300.29**	**281.62**	**31.82**	**92.21**	**18.52**	**142.55**
September	263.94	Long Term	101.69	95.18	18.69	22.14	8.26	49.09
		Medium Term	88.02	82.38	15.77	18.27	6.70	40.73
		Short Term	42.16	39.54	-	18.28	2.89	21.18
		RE-Solar (A)	20.96	19.90	-	7.35	0.10	7.45
		RE-Non-Solar (B)	52.08	48.91	-	25.09	1.21	26.30
		RE (A+B)	73.04	68.80	-	32.44	1.31	33.75
		Total	**304.91**	**285.96**	**34.46**	**91.13**	**19.16**	**144.75**
October	242.40	Long Term	130.42	122.07	23.97	28.39	10.59	62.96
		Medium Term	5.61	5.25	1.00	1.16	0.43	2.59
		Short Term	110.04	103.19	-	47.72	7.55	55.27
		RE-Solar (A)	21.66	20.56	-	7.59	0.11	7.70
		RE-Non-Solar (B)	12.31	11.56	-	5.93	0.28	6.22
		RE (A+B)	33.97	32.12	-	13.53	0.39	13.92
		Total	**280.03**	**262.62**	**24.98**	**90.80**	**18.96**	**134.74**
November	203.24	Long Term	74.95	70.15	13.78	16.32	6.09	36.18
		Medium Term	5.43	5.08	0.97	1.13	0.41	2.51
		Short Term	121.55	113.99	-	52.71	8.34	61.05
		RE-Solar (A)	20.96	19.90	-	7.35	0.10	7.45
		RE-Non-Solar (B)	11.92	11.19	-	5.74	0.28	6.02
		RE (A+B)	32.87	31.08	-	13.09	0.38	13.47
		Total	**234.79**	**220.20**	**14.75**	**83.24**	**15.22**	**113.21**
December	198.65	Long Term	124.93	116.93	22.96	27.20	10.15	60.31
		Medium Term	2.80	2.62	0.50	0.58	0.21	1.30
		Short Term	67.78	63.57	-	29.40	4.65	34.05
		RE-Solar (A)	21.66	20.56	-	7.59	0.11	7.70
		RE-Non-Solar (B)	12.31	11.56	-	5.93	0.28	6.22
		RE (A+B)	33.97	32.12	-	13.53	0.39	13.92
		Total	**229.49**	**215.22**	**23.46**	**70.70**	**15.40**	**109.57**
January	212.19	Long Term	126.94	118.81	23.33	27.64	10.31	61.28
		Medium Term	2.80	2.62	0.50	0.58	0.21	1.30
		Short Term	81.42	76.35	-	35.31	5.59	40.89
		RE-Solar (A)	21.66	20.56	-	7.59	0.11	7.70
		RE-Non-Solar (B)	12.31	11.56	-	5.93	0.28	6.22
		RE (A+B)	33.97	32.12	-	13.53	0.39	13.92
		Total	**245.13**	**229.89**	**23.83**	**77.05**	**16.50**	**117.39**
February	215.56	Long Term	128.38	120.16	23.60	27.95	10.43	61.97
		Medium Term	2.53	2.37	0.45	0.53	0.19	1.17
		Short Term	87.43	81.99	-	37.92	6.00	43.91
		RE-Solar (A)	19.56	18.57	-	6.86	0.10	6.96

Months	Sales	Power Purchase (Over-All)						
	MU	Type	MU at Ex-Bus	MU at NPCL	FC	VC	Others	Total
		RE-Non-Solar (B)	11.12	10.44	-	5.36	0.26	5.61
		RE (A+B)	30.68	29.01	-	12.22	0.35	12.57
		Total	**249.02**	**233.54**	**24.05**	**78.61**	**16.97**	**119.63**
March	204.00	Long Term	133.25	124.71	24.49	29.01	10.82	64.32
		Medium Term	2.80	2.62	0.50	0.58	0.21	1.30
		Short Term	65.65	61.56	-	28.47	4.50	32.97
		RE-Solar (A)	21.66	20.56	-	7.59	0.11	7.70
		RE-Non-Solar (B)	12.31	11.56	-	5.93	0.28	6.22
		RE (A+B)	33.97	32.12	-	13.53	0.39	13.92
		Total	**235.67**	**221.01**	**24.99**	**71.58**	**15.93**	**112.51**
Total	**2,780.19**	**Long Term**	**1,274.05**	**1,192.46**	**234.17**	**277.36**	**103.47**	**615.00**
		Medium Term	**519.69**	**486.41**	**93.12**	**107.85**	**39.55**	**240.52**
		Short Term	**799.36**	**749.63**	**-**	**346.66**	**54.85**	**401.51**
		RE-Solar (A)	**254.97**	**242.08**	**-**	**89.42**	**1.27**	**90.69**
		RE-Non-Solar (B)	**363.74**	**341.55**	**-**	**175.23**	**8.42**	**183.65**
		RE (A+B)	**618.72**	**583.62**	**-**	**264.65**	**9.69**	**274.33**
		Total	**3,211.82**	**3,012.12**	**327.29**	**995.43**	**205.36**	**1,528.08**

6.5 O&M EXPENSES

Petitioner's Submission

6.5.1 The Petitioner submitted that the Regulation 45 of the 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 again/loss) for the last five (5) financial years ending March 31, 2019 subject to prudence check by the commission. However if the True-Up values (without efficiency again/loss) are not available for FY 2018-19, then last five (5) available Trued-Up values (without efficiency again/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 upto 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.:

$EMP_n = EMP_{n-1} \times (1 + CPI\ inflation)$

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

6.5.2 The Petitioner submitted that as per the proviso reproduced above 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 even though these expenses are completely different and not comparable with the expenses which forms part of the A&G Expenses.

6.5.3 In this regard, the Petitioner submitted that the finance charges are being incurred on various facilities availed by the Petitioner with respect to Loans, both, Fund based and non-Fund based. The aforesaid facilities are linked with the volume of business viz. power purchase, debtors, capital expenditure, collection volumes in respect of digital transaction charges or CMS etc. and is nowhere dependent on inflation rates as has been proposed to be increased in the MYT Regulations, 2019.

6.5.4 The Petitioner submitted that, the Commission has been approving such expenses as per audited annual accounts from time to time in its various tariff orders. Some of the charges like collection charges on digital modes of collection are being incurred in pursuance of the directions of the Commission.

6.5.5 Thus, the above expenses are completely different and not comparable with the expenses which forms part of the A&G expenses and hence the Petitioner requested the Commission to not club finance charges with A&G Expenses and the allow the same on actuals/estimate as has been allowed hitherto.

6.5.6 Similarly, the Delayed payment surcharge accrues when a consumer defaults in payment of bills as per due date being generally 15 days from the date of billing which happens to be 2-7 days after the meter reading date which is generally taken after 30 /31 days interval. Hence, the total number of days after which the delayed payment surcharge accrues is almost 55 days which is more than the number of days for which a distribution licensee is compensated by interest on working capital as per MYT Regulations, 2019 i.e. 45 days. Hence, DPS belongs to the period beyond normative period and for 45 days for which interest on working capital is not provided in the Distribution Tariff Regulations. Thus, to appropriately compensate for the cost incurred for financing that deferred payment beyond the normative period, the Commission has been approving, in its various Tariff Orders issued from time to time since FY 2009-10 onwards, the cost of borrowing of such deferred receivables in the form of interest cost at relevant SBI-PLR. Consequently, it may be concluded that the financing cost of Delayed Payment Surcharge is nothing but interest on the money, equity or debt as the case may be arranged/provided by the Discom to fund delayed payment of electricity dues by the Consumers and has no similarity with nature of other A&G Expenses.

6.5.7 In view of the above, the Petitioner requested the Commission to not include the above finance charges and financing cost of DPS in determination of base year normative O&M expenses and the same should be allowed separately. Accordingly, the Petitioner has not included the above-mentioned Finance Charges and Financing Cost of DPS in the computation of Average A & G Expenses for 5 years and claimed it separately.

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.

6.5.8 The Petitioner submitted that since, the Commission has approved the above-referred legitimate expenses incurred by the Petitioner due to change in law / direction of the Commission after prudence check, 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 2020-21 vide its Tariff Order dated December 04, 2020 had not considered the above-mentioned additional O&M expenses being trued-up and approved in preceding years.

6.5.9 The Petitioner submitted that since the above additional O&M expenses on Compliance of directives of the State Commission, Impact of Service Tax and Impact of GST need to be considered in determination of normative O&M Expenses for Base Year, therefore, the Petitioner has included the same in the computation of Average O&M Expenses for Base Year.

6.5.10 The Petitioner further submitted that the Commission vide its Tariff Orders dated December 04, 2020 and August 26, 2021 has not approved the Petitioner’s claim for Impact of GST for FY 2018-19 and FY 2019-20 citing following grounds: -

a) The regulation does not provide for escalation of norms nor for adjustment of one-time expenses;

b) Since R & M Expenses are allowed as a percentage of GFA which includes GST, hence, the same may not be provided separately;

c) The Inflation indexes include the impact of GST.

6.5.11 The Petitioner stated that the Regulation 25 (e) & (g) of the MYT Regulations, 2014, are reproduced below as–

"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.

……………………

(g) The norms shall be determined at constant prices of base year and escalation on account of inflation shall be over and above the baseline."

6.5.12 The Petitioner submitted that, these provisions are general provisions and are applicable to entire O&M expenses i.e., employee cost, R&M expenses and A&G expenses. In-fact, in compliance to the above regulations, the Commission has been so far approving the impact of GST in its earlier orders viz. Order dated January 22, 2019 and Order dated September 03, 2019.

6.5.13 The Petitioner further submitted that, with respect to the finding of the Commission that GFA already includes GST impact, the Petitioner would like to mention here that R & M Expenses are allowed as a percentage of GFA and since, GST has come into effect only from July 01, 2017, thus, only additions post the aforesaid date can be said to include GST in the cost which is not even 10% of the whole GFA as at March 31, 2020 being considered for the purpose of computation of normative R & M expenses. Infact, in the subsequent years i.e. FY 2020-21 onwards, R & M Expenses are not computed based on GFA, hence, the aforesaid contention becomes all the more irrelevant.

6.5.14 Also, with regard to assertion that the indexes include impact of the Taxes, the

Petitioner submitted that the Press Release dated May 12, 2017 issued by Ministry of Commerce & Industry with respect to inflation indices of WPI (being used for the purpose of R&M expenses and A&G expenses) which clearly states that it does not include the impact of taxes.

6.5.15 Thus, the Petitioner requested the Commission to consider its claim by considering the provisions of the MYT Regulations 2019 which recognize Change in law/ Taxes & Duties as Uncontrollable Factor and its own Orders dated January 22, 2019 & September 03, 2019 wherein it has approved the differential impact of GST at 5.88% of the expenses.

6.5.16 In view of the above, the Petitioner submitted that it has included the impact of GST for FY 2018-19 and FY 2019-20 in the computation of Average O&M expenses for Base Year.

6.5.17 Accordingly, 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, 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 Table below:

TABLE 6-37: NORMATIVE O&M EXPENSES AS SUBMITTED BY THE PETITIONER (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	Employee Expenses	18.14	22.20	26.38	29.62	35.92	26.45
2	A&G Expenses	7.29	8.92	10.59	11.92	13.00	10.34
3	Regulatory Compliance	0.82	1.12	0.95	0.40	0.43	0.74
4	Additional expense due to change in S. Tax / GST on A & G Exp.	0.56	1.08	0.51	0.80	0.87	0.77
5	R & M Expenses	26.67	32.64	38.78	43.29	48.22	37.92
6	Additional expense due to change in S. Tax / GST on R & M Exp.	0.85	0.96	1.71	2.76	3.14	1.89
7	**Gross O&M Expenses**	**54.33**	**66.93**	**78.91**	**88.79**	**101.59**	**78.11**
8	Expenses Capitalised	(6.90)	(12.32)	(10.34)	(8.99)	(10.32)	(10.34)
9	**Net O&M Expenses**	**47.43**	**54.61**	**68.57**	**79.80**	**91.27**	**67.77**

6.5.18 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 herein below: -

TABLE 6-38: COMPUTATION OF NORMATIVE O&M EXPENSES FOR BASE YEAR AS SUBMITTED BY THE PETITIONER (RS. CRORE)

Sr. No	Particulars	Ref.	Emp. Exp.	A&G Exp.	R & M Exp.	O&M Exp.	Exp. Cap.	Net O&M
1	**Normative Exp. (FY 17-18)**	**a**	**26.45**	**11.85**	**39.81**	**78.11**	**(10.34)**	**67.77**
2	Escalation Factor (FY 18-19)	b	5.20%	5.20%	5.20%			
3	**Normative Exp. (FY 18-19)**	**c=a x (1 + b)**	**27.83**	**12.47**	**41.88**	**82.17**	**(8.99)**	**73.18**
4	Escalation Factor (FY 19-20)	d	6.30%	6.30%	6.30%			
5	**Normative Exp. (FY 19-20)**	**e=c x (1 + d)**	**29.58**	**13.25**	**44.51**	**87.35**	**(10.32)**	**77.03**

Normative Employee Expenses: -

6.5.19 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.:

$$EMP_N = EMP_{N-1} \times (1+CPI\ inflation)$$

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

Unquote

6.5.20 Accordingly, based on above Regulation, the normative employee expenses for FY 2022-23 works out as shown in following Table: -

Particulars	Emp. Exp. for Base Year	CPI Inflation	Emp. Exp. for FY 2020-21	CPI Inflation for FY	Emp. Exp. for FY 2022-23

	(FY 2019-20)	**for FY 2020-21**		**2021-22 and FY 2022-23**	
	A	**b**	**c=a x (1+b)**	**D**	**e=c x (1+d^2)**
Normative Emp. Expense	29.58	5.35%	31.16	6.00%	35.02

Administrative & General Expenses

6.5.21 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

6.5.22 Accordingly, considering the norms as mentioned above, the normative A&G expenses for FY 2022-23 works out as shown in following:

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 and FY 2022-23**	**A&G Exp. for FY 2022-23**
	A	**B**	**c=a x (1+b)**	**d**	**e=c x (1+d^2)**
Normative A&G Expense	13.25	2.96%	13.65	2.42%	14.31

Repair and Maintenance Expense

6.5.23 The 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

6.5.24 Accordingly, considering the norms as mentioned above, the normative R&M expenses for FY 2022-23 works out as shown in following Table: -

TABLE 6-39: R&M EXPENSES AS SUBMITTED BY THE PETITIONER FOR FY 2022-23

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 and FY 2022-23**	**R&M Exp. for FY 2022-23**
	A	**B**	**c=a x (1+b)**	**D**	**e=c x (1+d^2)**
Normative R&M Expense	44.51	2.96%	45.83	2.42%	48.07

6.5.25 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 6-40: SUMMARY OF O&M EXPENSES AS SUBMITTED BY THE PETITIONER (RS. CRORE)

S. No.	**Financial Year**	**Nature**	**Employee Expenses**	**A&G Expenses**	**Regulatory Compliance**	**S.Tax / GST on A&G Exp.**	**R & M Expenses**	**S.Tax / GST on R&M Exp.**	**Gross O&M Expenses**	**Expenses Capitalised**	**Net O&M Expenses**
1	FY 15-16	Trued-up	18.14	7.29	0.82	0.56	26.67	0.85	**54.33**	(6.90)	**47.43**
2	FY 16-17	Trued-up	22.20	8.92	1.12	1.08	32.64	0.96	**66.93**	(12.32)	**54.61**
3	FY 17-18	Trued-up	26.38	10.59	0.95	0.51	38.78	1.71	**78.91**	(10.34)	**68.57**
4	FY 18-19	Claimed Normative	29.62	11.92	0.40	0.80	43.29	2.76	**88.79**	(8.99)	**79.80**
5	FY 19-20	Claimed Normative	35.92	13.00	0.43	0.87	48.22	3.14	**101.59**	(10.32)	**91.27**
6	FY 17-18	Normative	26.45	10.34	0.74	0.77	37.92	1.89	**78.11**	(10.34)	**67.77**
7	FY 18-19	Normative	27.83	12.47			41.88		**82.17**	(8.99)	**73.18**

S. No.	Financial Year	Nature	Employee Expenses	A&G Expenses	Regulatory Compliance	S.Tax / GST on A&G Exp.	R & M Expenses	S.Tax / GST on R&M Exp.	Gross O&M Expenses	Expenses Capitalised	Net O&M Expenses
8	FY 19-20	Normative	29.58	13.25			44.51		**87.35**	(10.32)	**77.03**
9	FY 20-21	Normative	31.16	13.65			45.83		**90.64**	(9.82)	**80.82**
10	FY 21-22	Normative	33.03	13.98			46.94		**93.95**	(12.00)	**81.95**
11	FY 22-23	Normative	35.02	14.31			48.07		**97.40**	(14.00)	**83.40**

6.5.26 The Petitioner submitted that 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 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 Regulations-45 of MYT Regulations, 2019.

6.5.27 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 the Petitioner. The Petitioner requested the Commission to consider O&M expenses for FY 2022-23 as estimated by the Petitioner which are commensurate with the size of the business of the Petitioner and also necessary to run operations efficiently owing to following factors which are beyond the control of the Petitioner: -

Increase in Minimum Wages

6.5.28 All enterprise, associations, partnership, body corporates etc. are bound by the provisions of Minimum Wages Act 1948 and Government of State of Uttar Pradesh revises minimum wages under the provisions of the Minimum Wages Act, 1948 twice in a year (i.e., with effect from April and October). The comparative revised minimum wages of U.P. during FY 2021-22 is provided in Table below:

TABLE 6-41: MINIMUM WAGES IN STATE OF U.P.

Class of labour	As on 1st Apr'18	w.e.f. 1st Apr'21	w.e.f. 1st Oct'21	% increase in Cover A
	A	B	C	D
Skilled	9,381.00	11,185.00	11,316.16	20.63%
Semi-skilled	8,375.00	9,985.00	10,102.29	20.62%
Unskilled	7,613.00	9,078.00	9,184.00	20.64%

6.5.29 From the above, it may be seen that the wages applicable from April 01, 2021 was higher by 20%-21% as compared to wages prevailing on April 2018 *(i.e. mean financial year considered for determination of norms)*. Thus, the wages applicable for full FY 2021-22 and FY 2022-23 would be significantly higher as compared to the norms.

6.5.30 Petitioner submitted that it is pertinent to mention here that the Company's 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-NCR. The following Table shows that minimum wages prevailing during FY 2021-22 in NCT-Delhi were higher by 70%-74% as compared to State of UP: -

TABLE 6-42: COMPARATIVE MINIMUM WAGES IN STATE OF U.P. AND NCT-DELHI

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%

6.5.31 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 remuneration of senior cadre employees as well.

As the Commission is aware that all enterprise, associations, partnership, body corporates, companies etc. are bound by the provisions of Minimum Wages Act 1948 and the Petitioner has no option but to comply with the same. Therefore, impact of the changes in minimum wages is beyond the control of the Petitioner and cannot be subsumed within normative employee cost.

6.5.32 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 man power is involved much more than the increase in CPI being allowed through normative Employee Cost. From the above, the 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.

6.5.33 The Petitioner submitted that, it is also pertinent to mention here that although the MYT Regulation, 2019 provides for escalation of normative Employee Cost on the basis of Consumer Price Index (i.e., CPI), however, the resultant escalation is quite insufficient and more important is that the increase in minimum wages are not covered in CPI. Hence, the impact of increase in minimum wages do not get compensated through incremental CPI.

Recommendation of Sixth /Seventh Pay Commission:

6.5.34 The Petitioner submitted that 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 Petitioner 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 Petitioner's employees so as to retain and motivate them appropriately. 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. Accordingly, the Petitioner requested the Commission to approve the O&M expenses on actuals considering the significant increase in salaries and minimum wages.

Other Drivers affecting the O&M Expenses:

6.5.35 Petitioner submitted that the Commission, in its various orders, has time and again acknowledged the performance standards of the Petitioner and also in its Order dated January 29, 2019, observed that NPCL is the best performing utility in U.P. and having regard to observation of the Commission, the Petitioner has been striving hard to control and optimize its O&M expense primarily keeping the consumers interest in view. Regarding the distribution losses, due to weak and deficient manpower with local administration the law-and-order situation is very poor in the Greater Noida area with frequent and violent incidence occurring in the area. The administration or police personnel seldom finds time for attending to the complaints of pilferages/manhandling of the equipment's like transformer, cable etc. of the Company. This in turn pressurize the expenditure on frequent breakdown and repair, resulting into more Repair and Maintenance expenses.

6.5.36 The Model Regulations provides 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 14, 2010 has mentioned that:

Quote

> *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.*

Unquote

6.5.37 Based on the above, the Commission in its Tariff Order dated October 14, 2010 has directed the Petitioner 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 and prior approval of the Commission. Some of the important observations of their report are given below for the kind perusal and consideration of the Commission:

Quote

> ***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 1: 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:*

1. *More than optimal utilization on the employees especially the breakdown teams*
2. *Higher dependence on reactive maintenance instead of preventive maintenance approach*
3. *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 equipments, 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.*

Unquote

6.5.38 Petitioner submitted that the above discussion significantly points out that it is no more feasible for the Petitioner to sustain the existing 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. Also, it is pertinent to mention 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 Petitioner, and therefore, should be allowed in full.

6.5.39 The Petitioner submitted that O&M expenses of the Licensee are much lower in comparison to other Distribution Utilities of U.P. as well Discoms of other States.

6.5.40 The Petitioner submitted that the benchmarking study conducted by M/s Feedback Infra also confirms that the Petitioner is operating with a very low O&M cost.

6.5.41 The Petitioner submitted 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 in the area and to maintain a reliable and efficient power supply. The Petitioner has already started initiative in this regard which has also been acknowledged by the consultant viz. IMaCS. Therefore, it is submitted that O&M expenses may be allowed in full as estimated by the Petitioner for FY 2022-23. The Petitioner is preparing its system, processes, network etc. to keep future demand and growth in mind. Thus, in the aforesaid per unit comparison, though the current 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. Hence, the Commission is requested to kindly take a holistic view in the matter and approve the actual, reasonable and genuine costs of the petitioner on actual basis.

6.5.42 The Petitioner submitted that the O&M expenses being approved by the Commission on normative basis in accordance with the Regulations-45 of MYT Regulations, 2019 is grossly insufficient as compared to expenses estimated by the Petitioner. Therefore, the Commission is requested to approve the O&M expenses for FY 2022-23 as estimated by the Petitioner owing to various factors like minimum wages, High IT & automation expenses, increase in volumes, consumers numbers, office infrastructure etc.

Capitalization of Employee Expense:

6.5.43 The Petitioner submitted that it has estimated to capitalize an amount of Rs. 14.00 Crore out of the estimated employee cost of Rs. 82.46 Crore to be incurred during FY 2022-32, 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. It is pertinent to mention 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. These man-hours and cost is duly verified by the Statutory Auditors of the Company in detail and is approved by the Board of Directors of the Company subsequently. On the basis of the aforesaid policy, approved and followed consistently over the years, the Petitioner submitted to the Commission to consider the estimated capitalization of employee cost at Rs. 14.00 Crore during F Y 2022-23.

6.5.44 In view of the above, Petitioner requested the Commission to approve the net O&M expenses at Rs. 163.52 Crore for FY 2022-23 as estimated by the Petitioner subject to Truing-Up in future.

ADDITIONAL O&M EXPENSES FOR COMPLIANCE OF NEW/AMENDED REGULATION AND DIRECTION:

6.5.45 The Petitioner 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 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 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 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 especially 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 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.

6.5.46 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.

6.5.47 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. The Company 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.

6.5.48 The Petitioner submitted that in order to comply with the above new / amended Regulations, it is 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.

6.5.49 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

6.5.50 The Petitioner submitted that the Commission vide its Tariff Order dated 29.07.2021 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 July 29, 2021 of the U.P. State DISCOMs is reproduced below:

Quote

6.5.51 *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.*

Unquote

6.5.52 The Petitioner submitted that in view of the above, it has considered the impact of such additional O&M expenses at 20% of the O&M expenditure for the purpose of compliance of the New/amended Regulations and Directions as described above. The Petitioner requested the Commission to approve the same as being allowed to UPPCL's Discoms also over and above the normative O&M Expenses.

Commission's Analysis

6.5.53 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.:

$EMPn = EMPn-1 \times (1 + \text{CPI inflation})$

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:

$R\&Mn = R\&Mn-1 (1 + \text{WPI inflation})$

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

6.5.54 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

6.5.55 The Commission has 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 2020-21. Considering the Trued-Up employee expenses, A&G expenses and R&M expenses and inflation indices the Commission has computed O&M expenses for FY 2021-22.

6.5.56 The Commission, has computed the O&M expenses of FY 2021-22 which is escalated at Inflation / Escalation rate notified by Labour Bureau, Govt. of India

(GoI) (http://labourbureau.gov.in/LBO_indexes.htm) and Economic Advisor Govt. of India (https://eaindustry.nic.in/) respectively for different years. The inflation indices considered by the Commission for FY 2022-23 is shown in the Table below:

FY	Index		Inflation		60:40 Index	60:40 Index Inflation	Average of 3 years	
	WPI	CPI	WPI	CPI			WPI	CPI
FY 2017-18	114.88	284.42	2.92%	3.08%	216.60	3.05%	-	-
FY 2018-19	119.79	299.92	4.28%	5.45%	227.87	5.20%	-	-
FY 2019-20	121.80	322.50	1.68%	7.53%	242.22	6.30%	2.96%	5.35%
FY 2020-21	123.93	338.69	1.74%	5.02%	252.79	4.36%	2.57%	6.00%
FY 2021-22	139.37	355.44	12.46%	4.95%	269.01	6.42%	**5.29%**	**5.83%**

6.5.57 The employee expenses for FY 2022-23 are computed by escalating the base year (FY 2021-22) employee expenses by average CPI inflation of last 3 years (5.83%). The A&G expenses (including Finance Charges) and R&M expenses for FY 2022-23 are computed by escalating the base year (FY 2021-22) by average WPI inflation of last 3 years (5.29%). The Commission for FY 2022-23 has considered the employee expense capitalisation same as claimed by the Petitioner.

6.5.58 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.

6.5.59 The normative O&M expenses computed by the Commission are shown in the Table below:

TABLE 6-43: O&M EXPENSES APPROVED BY THE COMMISSION FOR FY 2022-23 (RS. CRORE)

S. No	Particulars	Projected	Normative	Allowed
1	Employee Expenses	82.46	33.08	33.08
2	R & M Expenses	72.23	41.31	41.31
3	A&G Expenses (with FC)	22.83	14.10	14.10

S. No	Particulars	Projected	Normative	Allowed
4	**Gross O&M Expenses**	**177.52**	**88.49**	**88.49**
5	Employee Expenses Capitalisation	14.00	14.00	14.00
6	A&G Expenses Capitalisation	0.00	0.00	0.00
7	**Total Capitalisation**	**14.00**	**14.00**	**14.00**
	Add: Smart Metering Opex/ Smart Metering / DT Metering / SOP implementation OPEX	14.61	0.00	0.00
8	**Net O&M Expenses**	**178.13**	**74.49**	**74.49**

6.6 CAPITAL EXPENDITURE

Petitioner's Submission

6.6.1 The Petitioner has submitted that considering various existing and upcoming Government & Private projects in and around Greater Noida and demand estimates approved by the Commission in its Business Plan Order dated November 26, 2020, the Petitioner has prepared its capital expenditure plan for FY 2022-23 at Rs. 169.79 Crore (excluding consumer contribution and assets handed over by GNIDA and Others) as provided in the Table below: -

TABLE 6-44: CAPITAL EXPENDITURE AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Particulars	Ref.	Estimated
Addition to GFA	a	208.04
Add: Closing CWIP	b	9.05
Less: Opening CWIP	c	(9.05)
Capital Expenditure	**d=a+b-c**	**208.04**
Add: Interest & Salary Capitalisation	e	14.00
Less: Assets Retired	f	(7.75)
Net Capex	**g=d+e-f**	**214.29**
Consumer Contribution	h	44.49
Capital Expenditure	i=g-h	169.79

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, the item-wise details of the gross capital expenditure projects of Rs.

222.04 Crore duly segregated between the aggregate value of projects exceeding Rs. 10 Crore and the aggregate value of capital expenditure projects not exceeding Rs. 10 Crore, are given in the Table below: -

TABLE 6-45: CAPITAL EXPENDITURE PROJECTS OF VALUE EXCEEDING RS. 10 CRORE AS SUBMITTED BY PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Nature of Works	Actual
1	Construction of Substations, Transformers, and Construction of 33kV, 11 kV & LT Network	10.22
2	33/11kV Substation cum Switching Station with DB GIS at Sector-01	12.82
	Total	**23.04**

TABLE 6-46: CAPITAL EXPENDITURE PROJECTS OF VALUE NOT EXCEEDING RS. 10 CRORE BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Nature of Works	Estimated
1	New Connections, Replacement Stock & Metering	74.63
2	Construction of Substations, Transformers, and Construction of 33kV, 11 kV & LT Network	71.59
3	Process System Automation	8.16
4	IT Projects	9.75
5	Civil Works & Office Infrastructure Facility	10.30
6	Tools & Testing Equipment	0.99
7	Vehicles	2.25
8	Demand Side Management	1.00
9	Leasehold Land	6.33
10	Sub-Total	185.00
11	Interest Capitalisation	Included above
12	Salary Capitalisation	14.00
13	Sub-Total	222.04

6.6.4 The Petitioner submitted that the item-wise details of quantity and cost of the aforesaid capex have been provided below:

TABLE 6-47: REPLACEMENT STOCK SUBMITTED BY THE PETITIONER FOR FY 2022-23

Particulars	Projected
Replacement of Meter due to meters being Burnt/defective/stolen	2.36
Replacement of Instrument Transformers due to Burnt/defective	0.56
Replacement/ Installation of Network in Urban & Industrial Area	0.36
Replacement of Old/Damaged/Broken Poles	0.93
Total	**4.21**

TABLE 6-48: NEW CONNECTIONS, REPLACEMENT STOCK & METERING SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

S. No.	Description	Estimated
1	New Connection Service and Load Augmentation (excluding GNIDA assets)	63.23
2	Replacement Stock	4.21
3	Metering	7.18
	Total	**74.63**

TABLE 6-49: CONSTRUCTION OF 33 KV NETWORK DEVELOPMENT

Description	UOM	Qty
Interconnection between 33kV Switching Substations and feeder evacuation from 33kV Switching Stations with 400sqmm cable	kM	23
Laying of 33kV Underground Mains for Zone-1 Area	kM	10
Laying of 33kV Underground Mains for Zone-2 Area	kM	10
Laying of 33kV 400Sqmm UG Mains for Feeder Construction from Receiving Substation	kM	5

TABLE 6-50: SCHEMES FOR DISTRIBUTION SYSTEMS AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Description	Projected
A	33/11 kV Substation & Switching Stations	20.44
B	Construction of 33 kV Network	19.20
C	Construction of 11 kV Network	26.44
D	Construction of LT Network	17.70
E	Network Safety related Work	3.70
	Total	**87.48**

TABLE 6-51: PROCESS SYSTEM AUTOMATION AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Description	Projected
A	Substation Automation Work	2.56
B	Implementation of BMS/ OMS Facility/ Smart grid Lab	0.54
C	**Upgradation /strengthening of Communication System**	0.97
D	Field Area Network Automation	0.76
E	Smart Grid Initiative	2.75
F	Business Continuity of GIS and associated Process	0.46
G	New Initiatives in GIS	0.10
H	Implementation of CCTV based Surveillance System	0.50
	Total	**8.65**

TABLE 6-52: CIVIL WORKS AND OFFICE INFRASTRUCTURE FACILITY AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Description	Projected
1	Civil Work of 33/11 kV Substation – 1 no.	3.25
2	Civil Work of 33/11 kV Switching cum Substation – 2 nos	6.50
3	Civil work for refurbishment of Surajpur South 33/11kV Switching Cum Substation	3.25

Sl. No.	Description	Projected
4	Boundary Wall at New plots for 33/11kV substations – 3 nos	2.25
5	Boundary wall of 11/0.4 kV Txr Houses – 5 Nos	0.70
6	Misc. Civil works	0.50
7	Other Office facilities	0.50
	Total	**16.95**

TABLE 6-53: IT PROJECTS AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Description	Projected
1	Implementation of Software Applications	2.85
2	Upgrading of Hardware Infrastructure Capacity	1.77
3	Upgrading of Networking Infrastructure	1.05
4	Purchase of Computers, Peripherals & Accessories	1.25
5	Purchase of Software Licenses	2.83
	Total	**9.75**

TABLE 6-54: TOOLS & TESTING EQUIPMENT AS SUBMITTED BY THE PETITIONER FOR FY 2021-22 (RS. CRORE)

S.No.	Description	Projected
1	Meter Testing Equipment	0.15
2	Transformer and other Testing Equipment	0.40
3	Safety Equipment	0.08
4	Fault Locating Van for LT Cables	0.36
Total		**0.99**

TABLE 6-55: DSM ACTIVITIES AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Description	Projected
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	

TABLE 6-56: LEASEHOLD LAND FOR SUBSTATIONS AS SUBMITTED BY THE PETITIONER (RS. CRORE)

Sl. No.	Description	Projected
1	Land for 33/11kV Substation (2 nos.)	6.33

6.6.5 Accordingly, based on capex for FY 2022-23 as discussed above, the funding of the aforesaid capital expenditure of Rs. 169.79 Crore is given in the Table below:

TABLE 6-57: CAPITAL EXPENDITURE FUNDING AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Particulars	Ref.	Projected
Addition to GFA	a	208.04
Add: Closing CWIP	b	9.05
Less: Opening CWIP	c	(9.05)
Capital Expenditure	**d=a+b-c**	**208.04**
Add: Interest & Salary Capitalisation	e	14.00
Less: Assets Retired	f	(7.75)
Net Capex	**g=d+e-f**	**214.29**
Consumer Contribution	h	44.49
Capex to be financed	**i=g-h**	**169.79**
Debt - 70%	j=i x 70%	118.86
Equity- 30%	k=h x 30%	50.94

6.6.6 The Petitioner requested the Commission to approve the above Capital Expenditure plan.

Commission's Analysis

6.6.7 The MYT Regulations, 2019 provides 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

6.6.8 The Commission vide deficiency dated December 31, 2021 directed the Petitioner to submit the prior approval of the Commission taken as per the MYT Regulations,

2019. In response to the Commission's query, the Petitioner submitted that it will submit a separate Petition for the approval of the Commission in accordance with Regulation 44.2 of the MYT Regulations, 2019.

6.6.9 The Commission further directed the Petitioner to confirm that it has not proposed any capital / additional capitalisation for FY 2022-23 for any 132/200 kV assets. In response to the Commission's query, the Petitioner submitted that it has not claimed or proposed any Capital expenditure / additional capitalisation for FY 2022-23 for 132/220 kV assets.

6.6.10 The Commission observed that the Petitioner has also proposed a Capital Expenditure of Rs. 2.25 Crore towards vehicles and Rs. 6.33 Crore towards Land. In response 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. 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.

6.6.11 With regards to the proposed Capital Expenditure for Land, the Petitioner submitted that keeping in view the fast growing load in Greater Noida, the Petitioner has considered to seek allotment of 2 lands for construction of 33/11 kV Substation. The land cost of Rs. 6.33 Crore includes premium, registration charges, stamp duty and one-time lease rent charges as notified by GNIDA.

6.6.12 The Petitioner submitted that the GNIDA 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 Petitioner is advised to seek allotment of land for construction of Electrical Sub-station etc. At times, the Petitioner was also advised to secure allotment of earmarked lands for Electric Substation etc. in advance in order to prevent allotment of such lands for other purposes under pressure due to scarcity of land in the given areas.

6.6.13 The Petitioner submitted that for 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 in an efficient, economical and structured manner 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.

6.6.14 The Petitioner further submitted that it 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. Over the period, with development and growth in demand, the Petitioner constructs electric substation on such lands.

6.6.15 The Petitioner mentioned that this not only enables the Petitioner to comply with its universal service obligation to provide electricity supply to its consumers on demand but also facilitates development of an efficient distribution system to meet the demand of its existing and prospective consumers as well as growth in demand every year.

6.6.16 The Commission observed that the Petitioner has submitted the Petition for approval of proposed Capital expenditure for FY 2022-23 and in 2 schemes which have values above Rs. 10 Crore, the value submitted in the ARR petition does not match with the values submitted in the aforesaid petition. The Commission vide deficiency dated February 25, 2022 directed the Petitioner to provide justification for the same. In response to the Commission’s query, the Petitioner submitted that while preparing ARR Petition for FY 2022-23, the cost of projects above Rs. 10 Crore was estimated based on broader parameters. However, while preparing the

Detailed Project Report (DPR), each project item was evaluated and considered in details alongwith the detailed prescriptions, specifications, BoM etc. to arrive at the total cost of the projects. Moreover, the variation in total cost of the projects of Rs. 0.80 Crore submitted in petition no. 1823 of 2022 for prior approval of capital expenditure is only 3.47 % as against the same submitted vide ARR petition no. 1797 of 2021 which is not significant.

6.6.17 The Commission has observed that in the capital expenditure plan submitted by the Petitioner, there are few schemes with capital expenditure above Rs. 10 Crore as summarized below:

Sl. No.	Proposed Capex	Value (Rs. Crore)
1.	Communication Infrastructure (Conversion of Single point to Multipoint)	15.04
2.	Communication Infrastructure (New Societies Individual Connection)	12.53

6.6.18 In this regard, the Petitioner submitted that the expenditure incurred on the projects /schemes such as Communication Infrastructure (Conversion of Single point to Multipoint) and Communication Infrastructure (New Societies Individual Connection) relates to 17,160 and 14,300 separate individual connections respectively, spread over approximately 35-45 multi-storied societies. Such work of providing individual connections is being implemented throughout the year in various societies. In view of the above, the aforesaid proposed capital expenditure doesn’t fall under Regulation 44.2 of the MYT Regulations, 2019. Further, the aforesaid amount would be recovered through consumer contribution from time to time.

6.6.19 The Commission has observed that the Petitioner has also shown the Replacement stock of Meters, Instruments Transformers, Network and Poles under head Capital Expenses. The Commission directed the Petitioner to provide the reason of the same under Capital expenses rather than R&M expenses. In response to this, the Petitioner submitted that expenses incurred on repair and / or maintenance of assets such as Meters, Transformers and Other Network etc. to prevent it from being completely worn out /damaged is considered as revenue expenditure and charged to R&M Expenses. However, when an asset such as Meters, Transformers and Other Network etc. becomes completely worn out / unusable / damaged beyond repair owing to being burnt, defective, stolen, vandalised, tempered etc. and the same is replaced with a new asset so as to keep the Distribution System Network functioning with same efficacy as it was before such asset became worn out / damaged / unusable etc., then expenditure incurred on replacement of such assets is considered as Capital Expenditure. Simultaneously, the value of such asset previously capitalised is removed from the Fixed Asset Register and the written Down Value thereof less the salvage value is charged to Profit and Loss account as Gain/ Loss on sale of Fixed Asset. Accordingly, the cost of asset such as Meters, Transformers and Other Network etc. being installed as replacement of the old assets being completely worn out / unusable/ damaged beyond repair is shown as capital expenditure under subhead “Replacement Stock”.

6.6.20 Further, 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. Accordingly, the Commission taking into consideration the views taken in the True Up of FY 2020-21 disallows the amount of Rs. 2.25 Crore claimed towards the GFA addition under the asset class of ‘vehicles’ for FY 2022-23.

6.6.21 With regard to the claim of the Petitioner’s claim towards capitalisation of land in FY 2022-23 of Rs. 6.33 Crore for 2 Nos. of 33/11 kV S/S. The Commission is of the view that the said lands seems to be part of project/ schemes of value greater than

Rs. 10 Crore, which as per Regulations 44 need prior approval of the Commission. Accordingly, the Petitioner is required to comply to the Regulations, further, the Commission disallows the same at this juncture.

6.6.22 Further, it is observed that the Petitioner has approached the Commission for approval of two (2) nos. capital expenditure schemes of above Rs. 10 Crore. As per the Regulations, quarterly filing of capital expenditure needs to be done by the Petitioner. Hence the Commission for the purpose of this Order disallows 25% on the capitalisation (after disallowance of vehicles, land and deduction of consumer contribution), subject to true-up in accordance with the Regulations.

TABLE 6-58: DETAILS OF CAPITALIZATION FOR FY 2022-23 AS APPROVED BY THE COMMISSION (RS. CRORE)

CAPEX		Total
Projected/Claimed	**A**	222.04
Disallowance of 100% (vehicles)	**B**	2.25
Disallowance of 100% (Land)	**C**	6.33
Consumer Contribution	**D**	44.49
Disallowance at 25%	**E=25%(A-B-C-D)**	42.24
Capex Approved for FY 2022-23	**F= A-B-E-F**	**171.22**

6.6.23 The break-up of closing CWIP claimed by the Petitioner is as shown in the Table below:

TABLE 6-59: BREAK-UP OF OPENING CWIP AS SUBMITTED BY THE PETITIONER

Sl. No.	Scheme	Amount (Rs. Crore)
1	Consultancy Service for preparation of DPR and Tender Document for construction of 220 kV Substation and Associated 220 kV Lines at BZP and KP5, Greater Noida	1.28
2	Materials for various Capital Projects	7.77
	Total	**9.05**

6.6.24 Further, since the Commission does not approve any assets of 132 kV & above & associated assets, the Commission cannot allow to pass the expenditure towards consultancy Service for preparation of DPR and Tender Document for construction of 220KV Substation and Associated 220kV Lines at BZP and KP5, Greater Noida. Accordingly, the expenditure of Rs. 1.28 Crore cannot be considered as part of CWIP.

6.6.25 Further, the Commission has considered the Employee capitalization as claimed by the Petitioner. Accordingly, the projected Capital formation, Capital Work in Progress and GFA allowed for FY 2022-23 is presented below:

TABLE 6-60: DETAILS OF CAPEX FOR FY 2022-23 AS APPROVED BY THE COMMISSION (RS. CRORE)

Particulars	Reference	Petition	Approved
Opening CWIP	A	9.05	7.77
Investments	B	208.04	157.22
Employee Expenses Capitalised	C	14.00	14
A&G Expenses Capitalised	D	0	0
Interest Capitalisation on Interest on long term loans	E	0	0
Total Investments	F=A+B+C+D+E	**231.09**	178.99
Transferred to GFA (Total Capitalisation)	G	222.04	171.22
Closing CWIP	H=F-G	**9.05**	**7.77**

TABLE 6-61: CAPITALIZATION APPROVED BY THE COMMISSION FOR FY 2022-23 (RS. CRORE)

Particulars		ARR Petition	Approved
Total Addition (capitalization) to Assets (excluding interest capitalisation)	A	222.04	171.22
Total Deletion to Assets (excluding interest capitalisation)	B	7.75	7.75
Net Capitalisation	**C=A-B**	**214.29**	**163.47**
Consumer Contribution	D	44.49	44.49
Net Capex	**E=C-D**	**169.79**	**118.98**
Debt Addition @ 70%	**70% of E**	**118.86**	**83.28**
Equity Addition @ 30%	**30% of E**	**50.94**	**35.69**

6.6.26 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

6.6.27 For the purpose of arriving at the opening values of FY 2022-23, the Commission has computed the values for FY 2021-22. For APR of FY 2021-22, the Petitioner has claimed total addition of assets i.e. capitalization of Rs. 290.94 Crore. As against the same, the Commission has considered the capitalisation of Rs. 243.52 Crore by deducting 100% of cost of vehicles and 25% of the claims under the other asset classes. The Commission has considered the deduction of assets as claimed by the

Petitioner.

6.6.28 The Commission has considered the Trued-Up closing GFA and consumer contributions of FY 2020-21 as the opening GFA of FY 2021-22. The computation is shown in tables below:

TABLE 6-62: PROJECTIONS OF GROSS FIXED ASSET APPROVED FOR FY 2021-22 (RS. CRORE)

Particulars	Derivation	Claimed	Computed (Provisional)
Opening GFA	A	1777.33	1350.18
Addition to GFA during the year	B	290.94	236.40
De capitalisation / deduction	C	6.58	6.58
Closing GFA	E=A+B-C	2061.69	1580.00

6.6.29 Accordingly, the closing GFA for FY 2022-23 has been computed after considering Net addition to the GFA during the year as shown in table below:

TABLE 6-63: GROSS FIXED ASSET OF NPCL FOR FY 2022-23 (RS. CRORE)

Particulars	Derivation	Claimed	Computed
Opening GFA	A	2061.69	1580.14
Addition to GFA during the year	B	222.04	171.22
Decapitalisation/ deduction	C	7.75	7.75
Closing GFA	E=A+B-C	2275.98	1743.60

6.7 DEPRECIATION

Petitioner's Submission

6.7.1 The Petitioner submitted based on the Capital Expenditure and GFA as shown above, the amount considered for Depreciation for determination of ARR for FY 2022-23 is provided in Table below:

TABLE 6-64: DEPRECIATION SUBMITTED BY THE PETITIONER FOR FY 2022-23

Sl. No.	Particulars	Reference	Projected
1	Depreciation on Gross Block till 01.04.2020	a	56.50
2	Depreciation on Gross Block after 01.04.2020	b	27.66
3	**Gross Depreciation for the Year**	**c=a+b**	**84.16**
4	Less: Depreciation on Consumer Contribution	d	15.82
5	**Net Depreciation**	**e-c-d**	**68.34**
6	Average Gross Fixed Asset	f	2,168.83
7	% of Average Gross Fixed Asset	g=c/f	3.88%

6.7.2 The Petitioner submitted that the depreciation of Rs. 84.16 Crore has been computed as per the methodology followed by the Commission in its tariff orders dated December 04, 2020 and August 26, 2021 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.

6.7.3 Accordingly, the Petitioner requested the Commission to approve the depreciation expenses as computed above for FY 2022-23.

Commission's Analysis

6.7.4 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

6.7.5 The Commission directed the Petitioners 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 State Owned Discoms to maintain 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. Further, the closing value of depreciation of FY 2021-22 is considered as opening depreciation for FY 2022-23. Based on the above the Commission has approved depreciation for FY 2022-23, as shown in the Table below:

TABLE 6-65: GROSS ALLOWABLE DEPRECIATION FOR ASSETS UPTO 31.03.2020 (Part-A) FOR FY 2022-23 (RS. CRORE)

For assets upto 31.3.2020 (Part-A)		Depreciation						
S. No.	Particulars	As on 1.4.2022 (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%	1.42
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	491.31	0.00	4.75	486.56	488.93	5.28%	25.82
5	Vehicles	0.00	0.00	0.00	0.00	0.00	9.50%	0.00

For assets upto 31.3.2020 (Part-A)		**Depreciation**						
6	Furniture & Fixtures	15.83	0.00	0.65	15.18	15.51	6.33%	0.98
7	Office Equipments	8.36	0.00	1.15	7.21	7.78	6.33%	0.49
8	Metering Equipment	33.22	0.00	1.20	32.02	32.62	5.28%	1.72
9	Communication Equipment	9.81	0.00	0.00	9.81	9.81	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 final valuation	0.74	0.00	0.00	0.74	0.74	15.00%	0.11
12	Solar Power Generation Equipments	0.17	0.00	0.00	0.17	0.17	5.28%	0.01
13	**Total Fixed Assets**	**808.95**	**0.00**	**7.75**	**801.20**	**805.08**		
14	Non depreciable assets (Land & Land Rights)	3.92	0.00	0.00	3.92	3.92		
15	**Depreciable assets**	**805.03**	**0.00**	**7.75**	**797.28**	**801.16**	**5.14%**	**41.21**

TABLE 6-66: GROSS ALLOWABLE DEPRECIATION FOR ASSETS ON 01.04.2022 FOR FY 2022-23 (RS. CRORE) (PART-B)

For assets from 1.4.2022 onwards		**Depreciation**						
S.No.	**Particulars**	**Opening GFA (as on 1.4.2022) for FY 2021-22**	**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	17.15	13.60	0.00	33.75	23.95	3.34%	0.80
3	Plant & Machinery	6.55	0.00	0.00	6.55	6.55	5.28%	0.35
4	Lines & Cables	246.55	137.24	0.00	383.79	315.17	5.28%	16.64
5	Vehicles	0.00	0.00	0.00	0.00	0.00	9.50%	0.00
6	Furniture & Fixtures	0.41	0.00	0.00	0.41	0.41	6.33%	0.03
7	Office Equipments	4.68	4.06	0.00	8.74	6.71	6.33%	0.42
8	Metering Equipment	19.35	4.02	0.00	23.37	21.36	5.28%	1.13
9	Communication Equipment	10.01	6.94	0.00	16.95	13.48	5.28%	0.71
10	Intangible Assets	10.05	4.56	0.00	14.60	12.32	15.00%	1.85
11	Assets taken over & pending final valuation	0.00	0.00	0.00	0.00	0.00	15.00%	0.00

For assets from 1.4.2022 onwards		Depreciation						
S.No.	**Particulars**	**Opening GFA (as on 1.4.2022) for FY 2021-22**	**Addition to GFA**	**Deduction to GFA**	**Closing GFA**	**Average GFA**	**Depreciation Rate**	**Allowable Gross Depreciation**
12	Solar Power Generation Equipments	1.69	0.80	0.00	2.50	2.09	5.28%	0.11
13	**Total Fixed Assets**	**316.44**	**171.22**	**0.00**	**487.66**	**402.05**		**22.05**

TABLE 6-67: NET APPROVED DEPRECIATION FOR ASSETS BEFORE 01.04.2022 (PART A+ PART B) OF NPCL FOR FY 2022-23 (RS. CRORE)

Particulars	Claimed (Part A+ Part B)	Approved (Part A+ Part B)
Gross Allowable Depreciation	84.16	63.26
Less: Equivalent amount of depreciation on assets acquired out of the Consumer Contribution	15.82	15.82
Net Allowable Depreciation	**68.34**	**47.44**

6.8 INTEREST ON TERM LOAN

Petitioner's Submission

6.8.1 The Petitioner submitted that 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:…

Unquote

6.8.2 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 2020-21. However, as the Petitioner has filed appeals against the 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 Petitions / submission, for determination of Interest on Term Loan for FY 2022-23.

6.8.3 Consequently, on the basis of Capital Expenditures for FY 2018-19 to FY 2021-22 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. 569.21 Crore.

6.8.4 The summary of interest on Term Loan (normative) for FY 2022-23 based on above Opening Debt and Additional Debt Requirement of Rs. 118.86 Crore for FY 2022-23 is given in the Table below: -

TABLE 6-68: INTEREST ON TERM LOAN AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Loan Computation	Ref.	Projected
1	**Net Normative loan – Opening**	**a**	569.21
2	Increase/Decrease due to ACE during the Year	b	118.86
3	Repayments of Normative Loan during the year	c	68.34
4	**Net Normative loan – Closing**	**d=a+b-c**	619.72
5	Average Normative Loan	e=(a+d)/2	594.46
6	Weighted average Rate of Interest on actual Loans	F	9.91%
7	**Interest on Normative loan**	**g=e x f**	58.92

6.8.5 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.

6.8.6 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

6.8.7 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 2022-23.

6.8.8 Accordingly, the total normative interest on Term Loan has been claimed as Rs. 58.92 Crore.

Commission's Analysis

6.8.9 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 for approval of ARR in the Tariff Order for FY 2020-21 and FY 2021-22. Further, as per the Regulation 23.5, the rate of interest on long term loan is considered as the weighted average rate of interest of the actual long term loan portfolio of the year. The relevant extract is provided in the following:

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

6.8.10 The Commission has discussed detailed approach taken for computation of opening loan while doing True Up for FY 2020-21. The opening loan balance for FY

2021-22 is calculated by taking into consideration the closing normative loan balance of FY 2020-21. Based on this closing loan balance for FY 2021-22 has been determine. Further, the Commission has considered normative closing loan balance of APR year FY 2021-22 as opening loan balance for FY 2022-23.

6.8.11 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.

6.8.12 The Commission has observed that the Petitioner for FY 2022-23 has claimed interest capitalisation as Nil. Hence the interest capitalisation is considered as Nil for FY 2022-23.

6.8.13 The Commission has considered the weighted average rate of interest as approved in the true-up of FY 2020-21.

6.8.14 The computations for interest on loan term loan are shown in table below:

TABLE 6-69: INTEREST ON LONG TERM LOAN APPROVED BY THE COMMISSION FOR FY 2022-23 (RS. CRORE)

Particulars	Petitioner's Claim	Approved
Opening Loan	**569.20**	**424.12**
Loan Additions (70% of Capitalisation)	123.14	83.28
Less: Repayments (Depreciation allowable for the year)	68.34	47.42
Closing Loan Balance	**619.72**	**459.98**
Rate of Interest	9.91%	9.91%
Interest on long term loans	**58.92**	**43.82**

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 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

6.9.2 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 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.

6.9.3 The Petitioner further submitted that the Commission in its Tariff Order dated August 26, 2021 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 leading to disallowance of interest on working capital based on Regulation-25.2 of the MYT Regulations, 2019.

6.9.4 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

6.9.5 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 the other charges for electricity. Therefore, the same is integral part of the revenue and the receivables of the Petitioner.

6.9.6 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.

6.9.7 In view of the above, the Petitioner submitted its computation of interest on working capital for FY 2022-23 in following Table for the kind perusal and approval of the Commission: -

TABLE 6-70: INTEREST ON WORKING CAPITAL AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Particulars	Ref	Projected
1	O&M expenses for 1 month	a	15.04
2	One and a half month equivalent of expected revenue from distribution tariff	b	297.79
3	Maintenance spares @ 40% of the R&M Expense for 2 Months	c	5.30
4	**Gross Total**	**d=a+b+c**	**318.12**
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	288.96
7	Received during the year (Net of Refunds)	f	10.64
8	Closing Balance	g=e+f	299.59
9	**Average Security Deposit**	**h=(e+g)/2**	**294.28**
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**	**283.00**
12	**Net Working Capital**	**k=d-j**	**35.12**
13	Rate of Interest for Working Capital (SBI - 1Year MCLR + 2.50%)	l	9.50%
14	**Interest on Total Working Capital**	**m=k*l**	**3.34**

6.9.8 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.

6.9.9 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 supply of power by UPPCL. The matter is now pending before the Hon’ble Supreme Court of India.

Commission's Analysis

6.9.10 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. The Commission vide deficiency dated December 31, 2021 directed the Petitioner to revise its submission as per the MYT Regulations, 2019 and revised its ARR for FY 2022-23. In response to the Commission's query, the Petitioner submitted that as per the provision of 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 along with the other charges for electricity. Therefore, the same is integral part of the revenue and hence, the receivables of the Petitioner. The Commission is requested to consider the Electricity Duty as part of Receivable for determination of Interest on Working Capital. Further, the Petitioner has estimated the Revenue including Electricity Duty by multiplying the factor of 1.05 to the estimated net Revenue subject to True-Up in subsequent years based on Audited Accounts.

6.9.11 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 9.50%. The link for the same is: https://www.sbi.co.in/web/interest-rates/interest-rates/mclr-historical-data.

6.9.12 The Interest on Working Capital as per MYT Regulations, 2019, is determined in the tables below:

TABLE 6-71: INTEREST ON WORKING CAPITAL APPROVED BY THE COMMISSION FOR FY 2022-23 (RS. CRORE)

Particulars	ARR Petition	Approved
One month's O & M Expenses	15.04	6.21
Maintenance spares @ 40% of R&M expenses for two months	5.30	2.75

Particulars	ARR Petition	Approved
One and half month equivalent of the expected revenue from charges for use of Distribution systems at the prevailing Tariff (excluding electricity duty)	297.79	250.86
Gross Total	**318.12**	**259.82**
Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003		
Opening Balance		288.96
Received during the year		10.64
Closing Balance		299.59
Less: Security Deposit		11.28
Net Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	283.00	283.00
Net Working Capital	**35.12**	**0.00**
Rate of Interest for Working Capital	9.50%	**9.50%**
Interest on Total Working Capital	**3.34**	**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 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 dated August 26, 2021 has approved the Interest on Security Deposit at 4.25% p.a. viz. RBI's Bank Rate prevailing on April 01, 2021 for FY 2021-22. 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 2022-23 as given below in Table for the kind perusal and approval of the Commission:

TABLE 6-72: INTEREST ON SECURITY DEPOSIT AS SUBMITTED BY THE PETITIONER FOR FY 2022-223(RS. CRORE)

Sl. No.	Particulars	Ref.	Projected
1	Opening Balance of Security Deposit	a	288.96
2	Addition During the year	b	10.64
3	Closing Balance for Security Deposit	c=a+b	299.59
4	**Average Balance for Security Deposit**	**d=(a+c)/2**	**294.28**
5	Rate of Interest	e	4.25%
6	**Interest payable on Security Deposit**	**f=dxe**	**12.51**

6.10.2 Since, the Petitioner has computed the Interest on Working Capital and Interest on Consumer Security Deposit in line with the MYT Regulations, 2019, the Petitioner requested the Commission to consider and approve the same for determination of ARR for FY 2022-23.

Commission Analysis

6.10.3 The opening balances of security deposits have been considered as per closing figures of FY 2021-22 and additions during the year FY 2022-23 is considered same as projected by the Petitioner.

6.10.4 It can be observed from the above extract of UP Electricity Supply Code, 2005 that the Bank Rate as on 1st April of FY 2022-23 is applicable for computing interest on security deposit. Hence, the Commission has taken the Bank Rate of 4.25% applicable as on April 01, 2022.

6.10.5 Source:(https://rbidocs.rbi.org.in/rdocs/Wss/PDFs/5T_08042022BF97FB2921F84D9FAC0F2F511C56A9B7.PDF). The Commission has approved the Interest on Consumer Security Deposit for FY 2022-23 as shown in the Table below:

TABLE 6-73: INTEREST ON SECURITY DEPOSIT APPROVED FOR FY 2022-23 (RS. CRORE)

Particulars	ARR Petition	Approved
Opening Balance of Security Deposit	288.96	288.96
Addition During the year	10.64	10.64
Closing Balance for Security Deposit	299.59	299.59
Average Balance for Security Deposit	294.28	294.28
Rate of Interest	4.25%	4.25%
Interest payable on Security Deposit	**12.51**	**12.51**

6.11 FINANCE CHARGES

Petitioner's Submission

6.11.1 The Petitioner submitted that it has to incur various finance charges for availing of financial products and services for the purpose of meeting its financial and other business needs. These charges are genuine business expenditure and has been explained in details as under:

i) **Loan Processing Charges:** The Petitioner submitted that it has negotiated a number of facilities in preceding years and also estimated the requirement for ensuing year. During, FY 2022-23, the Petitioner has estimated to incur expenses aggregating to Rs. 0.31 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 Petitioner has been getting its credit rating from India Rating & Research (P) Limited.

iii) **Collection facilitation charges:** The Petitioner submitted that continuing the efforts to provide maximum possible facilities to the consumers, the Petitioner has 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 May 29, 2015 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**: The Petitioner submitted that 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 Discom 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.

Quote

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.

Unquote

6.11.2 Thus, in FY 2022-23, the Petitioner submitted that will have to incur additional expenses to issue Letter of Credit in favour of Generating Companies.

6.11.3 Therefore, based on above discussion the Petitioner requested the Commission to approve the Finance Charges for FY 2022-23 as summarized in the Table below: -

TABLE 6-74: FINANCE CHARGES SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Particulars	Projected
1	Credit Rating Charges	2.66
2	Processing Charges	
3	Collection Facilitation Charges	
4	SBLC & Other Finance Charges	
	Total	**2.66**

Commission's Analysis

6.11.4 The Regulation 45.3 of the UPERC (MYT for Distribution and Transmission Tariff) Regulations, 2019 provides that:

Quote

> *"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."*

Unquote

6.11.5 The Regulation provides that the all the Finance charges shall be part of A&G Expenses for Control Period FY 2020-21 to FY 2024-25. Therefore, Commission has not considered the Petitioner contention to allow Finance charges for FY 2022-23 separately.

6.12 SUMMARY OF INTEREST CHARGES

Petitioner's Submission

6.12.1 The details of total interest and finance charges estimated for FY 2022-23 is given in the Table below: -

TABLE 6-75: TOTAL INTEREST AND FINANCE CHARGES SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Description	Petitioner Submission
1	Interest on Long term loans	58.92
2	Interest on working capital facilities	3.34
3	Interest on security deposit	12.51
4	Finance Charges	2.66
5	**Total Interest & Fin. Charges**	**77.43**

Commission's Analysis

6.12.2 The summary of Interest charges approved by the Commission for FY 2022-23 is as follows:

TABLE 6-76: TOTAL INTEREST AND FINANCE CHARGES APPROVED FOR FY 2022-23 (RS. CRORE)

Particulars	FY 2022-23	
	Petition	Approved
Interest on Long term loans	58.92	43.81
Interest on short term loans/working capital	3.34	0.00
Finance charges	2.66	0.00
Interest on security deposit	12.51	12.51
Total Interest & Finance charges	77.43	56.32
Less: Interest capitalization	0.00	0.00

Particulars	FY 2022-23	
	Petition	Approved
Net Interest & Finance charges	**77.43**	**56.32**

6.13 RETURN ON EQUITY

Petitioner's Submission

6.13.1 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

6.13.2 The Petitioner submitted that as described in submissions on True-Up for FY 2020-21, based on Regulation 20.2 of the MYT Regulation, 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 and August 26, 2021 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 2022-23.

6.13.3 Consequently, on the basis of Capital Expenditures for FY 2018-19 to FY 2021-22 as claimed by the Petitioner as well as stipulated debt equity of 70:30, the opening normative net Equity for FY 2022-23 works out to Rs. 517.25 Crore.

6.13.4 The summary of Return on Equity for FY 2021-22 based on above referred Opening Equity and equity portion of Assets Capitalised during FY 2022-23 of Rs. 52.51 Crore is given in Table below: -

TABLE 6-77: RETURN ON EQUITY AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sr. No.	Particulars	Reference	Projected
1	Equity (Opening Balance)	A	517.25
2	Net additions during the year	B	52.51
3	Equity (Closing Balance)	c=a+b	569.77
4	Average Equity	d=(a+c)/2	543.51
5	Rate of Return on Equity	E	15%
6	**Return on Equity**	**f=d x e**	**81.53**

6.13.5 The Petitioner requested the Commission to allow the ROE for FY 2022-23 in full as computed above.

Commission's Analysis

6.13.6 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 for FY 2020-21 & FY 2021-22 both.

6.13.7 The Commission has discussed detailed approach taken for computation of opening equity considered for FY 2020-21. The opening equity balance for FY 2021-22 is calculated by taking into consideration the closing equity balance of FY 2020-21. Based on this closing equity for FY 2021-22 has been determine. Further, the Commission has considered closing equity balance of APR year FY 2021-22 as opening equity balance for FY 2022-23.

6.13.8 As per Regulation22 of MYT Regulations, 2019 the Commission has considered rate of return on equity as 15%. The relevant extract of the Regulation is as under:

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

6.13.9 For the purpose of arriving at the opening values of FY 2022-23, the Commission has computed the values for FY 2021-22. The Commission has considered closing equity balance of APR year FY 2021-22 as opening equity balance for FY 2022-23. Further, 30% of Net GFA addition (after considering deduction / de-capitalization and consumer contribution in GFA) has been considered as equity addition during the year. Accordingly, the Return on Equity computed is as shown in the Table below:

6.13.10 The Return on Equity (RoE) for FY 2022-23 is shown in the Tables below:

TABLE 6-78: ROE APPROVED FOR FY 2022-23 (RS. CRORE)

Particular	ARR Petition	Approved
Equity (Opening Balance)	517.25	369.47
Net additions during the year	52.51	35.69
Equity (Closing Balance)	569.77	405.16
Average Equity	**543.51**	**387.32**
Rate of Return on Equity	15.00%	15.00%
Return on Equity	**81.53**	**58.10**

6.14 INCOME TAX

Petitioner's Submission

6.14.1 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

6.14.2 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

6.14.3 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 2022-23 at the rate of 25.17% as against normal tax rate of 34.94%.

6.14.4 Considering the above Regulation, the Petitioner has computed the income tax liability for FY 2022-23 as shown in Table below:

TABLE 6-79: INCOME TAX AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Nature of Tax	Reference	Projected
1	Return on Equity	a	81.53
2	Income Tax Rate	b	25.17%
3	**Total Tax Expense**	**c=a x b/(1-b)**	27.42

6.14.5 The Petitioner submitted that the Income Tax Liability as shown above has been computed in accordance with MYT Regulations, 2019, and requested the Commission to approve and considering the same for determination of ARR for FY 2022-23.

Commission's Analysis

6.14.6 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.

6.14.7 Therefore, the Commission has approved Income tax for FY 2022-23 by grossing up RoE at the current Tax rate, i.e., 25.17%, without considering any efficiency gains. The Commission shall consider the Tax Demand for earlier years at the time of Truing-Up based on the Regulations applicable for the respective year. The detailed computation of Income Tax approved for FY 2022-23 is shown in the Table below:

TABLE 6-80: INCOME TAX APPROVED FOR FY 2022-23 (RS. CRORE)

Particular	Ref.	ARR Petition for FY 2022-23	Approved for FY 2022-23
Return on Equity	a	81.53	58.10
Income Tax Rate	b	25.17%	25.17%
Total Tax Expense	**c=a x b/(1-b)**	**27.42**	**19.54**

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 only. Therefore, the Petitioner has considered creation of contingency reserve in ARR for FY 2022-23 at lower limit of 0.25% of Opening Gross Fixed Asset as per the MYT Regulations, 2019 as shown in Table below: -

TABLE 6-81: CONTINGENCY RESERVE AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Particulars	Projected
1	Opening GFA	2061.69
2	Contribution to Contingency Reserve	5.15
3	% of Opening GFA	0.25%

6.15.3 The Petitioner requested the Commission to allow provision of contingency reserve in ARR for FY 2022-23 as claimed above.

Commission's Analysis

6.15.4 The Commission in the past Tariff Orders had 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 2022-23 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 Regulation 46 of the MYT Regulations, 2019 specifies in respect of Provision for Write-off of Bad and Doubtful Debts as under:

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:

Unquote

6.16.2 The Petitioner submitted that the 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 2022-23 as provided in the Table below:

TABLE 6-82: PROVISION FOR BAD AND DOUBTFUL DEBT AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Description	Ref.	Projected
1	Revenue billed for the year	a	2382.32
2	Provision for Bad & Doubtful debts	b	47.65
3	Provision as % of Revenue billed	c=a/b	2%

6.16.3 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.

6.16.4 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 2022-23.

Commission's Analysis

6.16.5 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

6.16.6 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 2020-21 i.e. 1.01% (excluding electricity duty).

6.16.7 The Commission will carry out the Truing-Up of bad debts subject to actual writing off of the bad debts during the year and as per audited accounts. The provision of bad and doubtful debts allowed for FY 2022-23 is depicted in the tables below:

TABLE 6-83: PROVISION FOR WRITE OFF FOR BAD AND DOUBTFUL DEBTS AS APPROVED BY THE COMMISSION FOR FY 2022-23 (RS. CRORE)

Particular	ARR Petition	Approved
Revenue billed during the year	2382.32	2229.86
Provision as % revenue billed claimed	2.00%	1.01%
Provision of bad and doubtful debt	**47.65**	**22.51**

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 2022-23 is summarized in Table below:

TABLE 6-84: NON-TARIFF INCOME SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Particulars	Projected
1	Income from Contingency Reserves Investments	0.13
2	Miscellaneous Receipts from other sources	1.22
3	Delayed Payment Surcharge	0.85
4	**Total Non-Tariff Income**	**5.25**
5	Income from Contingency Reserves Investments	7.45

6.17.3 The Regulation 25.2 of the MYT Regulations, 2019 provides 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

6.17.4 The Petitioner submitted that the normative working capital computed as per above regulation compensates the Discom only for the 45 days of credit period which is given to the consumers. However, Delayed Payment Surcharge accrues when a consumer defaults in payment of bills as per due date which is generally 15 days from the date of billing which happens to be 2-7 days after the meter reading date which is generally taken after 30 /31 days interval. Hence, the total number of days after which the delayed payment surcharge accrues beyond the number of days for which a distribution licensee is compensated by interest on working capital as per above i.e. 45 days.

6.17.5 Thus, it can be concluded that DPS belongs to the period beyond normative period of 45 days for which interest on working capital is not provided in the Distribution Tariff Regulations., while, the late payment surcharge is charged only if the delay is more than normative credit period. Accordingly, for the period of delay beyond the normative period, the Discom has to be compensated with the cost of such additional financing.

6.17.6 Further, the Petitioner submitted that for debtors older than 60 days but not more than 90 days, the banks provide funding upto 75% of such debtors and remaining is contributed by the Petitioner through equity. Further, for debtors older than 90 days, the banks normally do not provide any funding and the same is being financed by the Petitioner through equity. Thus, to adequately compensate the Petitioner, the Commission has been, hitherto, approving the financing cost of such deferred receivables at the rate equivalent to weighted average SBI-PLR from last many Tariff Orders.

6.17.7 The Petitioner submitted that in regard to the above, reference may be also be made to Hon'ble APTEL's Judgment dated July 30, 2010 in Appeal no. 153 of 2009, wherein it was observed as under:

Quote

> *23. In the light of the aspects pointed out on behalf of the Appellant, the reply made on behalf of the State Commission may not be correct for the reasons given below:*
>
> *(i) The normative working capital compensates the distribution company in delay for the 2 months credit period which is given to the consumers.*
>
> *(ii) Admittedly, the late payment surcharge is charged only if the delay is more than normative credit period.*
>
> (iii) Thus, for the period of delay beyond the normative period, the Distribution *company has to be compensated with the cost of such additional financing.*
>
> ……………..
>
> …………….
>
> *25…………While fixing the interest rate, the State Commission should have considered the prevalent SBI prime lending rate. Even in the said judgment, the Tribunal has laid down the principle that the rate of carrying cost must be derived from prevalent prime lending rates."*
>
> …….

Unquote

6.17.8 Based on above judgement, the Commission has been allowing the Cost of Borrowing for Delayed Payment Surcharge starting with Tariff Order dated October 19, 2012 where it observed as follows:-

Quote

> *6.15.6 It is quite apparent that delayed payment surcharge belongs to the period beyond normative period for which the licensee is not compensated at the time of computation of interest on working capital. Thus, to appropriately compensate for the cost incurred for financing that deferred payment beyond the normative period, the Commission in this order approves to reduce the amount of non-tariff income by the financing costs of DPS.*
>
> *6.15.7 The financing cost of delayed payment surcharge is computed by the Commission based on the actual DPS for the year. The DPS is grossed up conservatively based on the highest applicable surcharge rate which is 1.5% per month. Further, the financing cost is arrived at on the grossed-up amount and the weighted average SBI PLR rate applicable.*

Unquote

6.17.9 The Petitioner submitted that the DPS accrues on receivables outstanding beyond the normative period of 45 days being considered for approving the normative working capital fund. Accordingly, receivables for more than 45 days on which DPS accrues are funded by the licensee which has also been acknowledged by the Commission in its various previous orders.

6.17.10 Further, the Petitioner submitted that the licensee needs to fund such overdue receivables either through borrowings or from its own sources and in either of cases, it is entitled to be compensated with the cost of financing the same. Therefore, existence / non-existence of loans or incurrence of funding cost against DPS is not relevant for computation of compensatory normative allowance of cost of funding DPS.

6.17.11 The Petitioner submitted that, it needs allowance for cost of financing of delayed payment is well acknowledged in Commissions earlier tariff orders as well as the same is evident from the proviso to Regulation-45 of the MYT Regulations, 2019 as reproduced below: -

Quote

> *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.*

Unquote

6.17.12 The Petitioner in its various submissions has highlighted that the banks / non-banking financial institutions (NBFCs) provides funding only up-to 75% of 60 days of debtors and the licensee has to fund such delayed recovery of dues / receivables through Promoters' Equity. Thus, the Petitioner effectively bears the cost of funding of Delayed Payments at the rate of 10.88% (i.e., 75% of 9.50% being Interest on Working Capital and 25% of 15% being Return on Equity). However, as the Commission treats such excess equity as debt only (for the purpose of Capex / Working Capital/deferred receivables etc.) and has been earlier approving the cost of financing DPS on normative basis being computed by grossing up actual DPS for the year on highest applicable surcharge rate i.e., 2% per month and applying the normative rate of interest considered for working capital loan i.e., weighted average SBI MCLR on principle amount so computed. Therefore, without prejudice to its rights, the Petitioner has considered the RoI of 9.50% being the applicable SBI MCLR with margin for determination of cost of borrowing of Delayed Payment Surcharge.

6.17.13 Accordingly, based on the same principles, the cost of borrowing in respect of Delayed Payment Surcharge for FY 2022-23 has been computed as shown in Table below: -

TABLE 6-85: COST OF BORROWING SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Particulars	Ref	Projected
1	Delayed Payment Surcharge	a	5.25
2	Working Capital Amount Utilisation @ 24% p.a.	b=(a/24%)	21.87
3	Applicable Interest Rate for Working Capital	c	9.50%
4	**Cost of Borrowing for DPS**	**d=b x c**	**2.08**

6.17.14 Accordingly, the non-tariff income has been considered after reducing the cost of borrowing of deferred payment beyond normative period from the total non- tariff income for the purpose as in ARR as shown in Table below:

TABLE 6-86: NET NON-TARIFF INCOME AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (RS. CRORE)

Sl. No.	Particulars	Projected
1	Non-Tariff Income including DPS	7.45
2	Less: Cost of Borrowing for DPS	(2.08)
3	**Net Non-Tariff Income**	5.37

Commission's Analysis

6.17.15 The Commission for the purpose of this Order has considered the non-tariff income for FY 2022-23 at the same level of non-tariff income approved in true-up for FY 2020-21. Accordingly, the Commission approves Non-Tariff Income as for FY 2022-23 as shown in the Table below:

TABLE 6-87: NON-TARIFF INCOME APPROVED FOR FY 2022-23 (RS. CRORE)

Particular	ARR Petition	Approved
Non-Tariff Income including DPS	7.45	22.29
Less: Cost of Borrowing for DPS	2.08	-
Net Non-Tariff Income	**5.37**	**22.29**

6.17.16 Further, any variation on this account would be taken up at the time of True-Up.

6.18 SUMMARY OF ARR FOR FY 2022-23

6.18.1 Based on the above discussion the summary of ARR for Control Period is shown in Table below:

TABLE 6-88: SUMMARY OF ARR APPROVED FOR FY 2022-23 (RS. CRORE)

Particulars	FY 2022-23	
	Petition	Approved
Power Purchase Expenses	1722.05	1323.80
Transmission Charges (UPPTCL+PGCIL)	236.24	207.56
Employee cost	82.46	33.08
A&G expenses	22.83	14.10
R&M expenses	72.23	41.31
Smart Metering / DT Metering / SOP implementation OPEX	14.61	0.00
Gross O&M Expenses	**192.13**	**88.49**
Interest charges	77.43	56.32
Depreciation	68.34	47.42
Contingency Reserve	5.15	0.00
Income Tax	27.42	19.54

Particulars	FY 2022-23	
	Petition	Approved
Gross Expenditure	**2328.77**	**1743.14**
Employee cost capitalized	14.00	14.00
Interest capitalized	0.00	0.00
A&G expenses capitalized	0.00	0.00
Net Expenditure	**2314.77**	**1729.14**
GST Impact	2.29	0.00
Provision for Bad & Doubtful debts	47.65	22.51
Miscellaneous Expenses	2.33	0.00
Total net expenditure with provisions	**2367.03**	**1751.65**
Add: Reasonable Return / Return on Equity	81.53	58.10
Less: Non Tariff Income	5.37	22.99
Add: Efficiency Gains	0.00	0.00
Annual Revenue Requirement (ARR)	**2443.19**	**1786.75**
Revenue from approved Tariff	**2268.87**	**2229.86**
Tariff revision impact (10% Regulatory Discount)		-222.99
Revenue Gap/ (Surplus)	**174.32**	**(220.13)**

6.18.2 Analysis of few parameters is depicted below:

TABLE 6-89: SUMMARY OF FY 2022-23 (RS. CRORE)

Particulars	Units	Value
Total sales	MU	2780.19
Revenue from Tariff	Rs. Crore	2229.86
Total power purchase	MU	3012.12
Total power purchase cost	Rs. Crore	1531.36
ARR	Rs. Crore	1786.77
APPC without Transmission (at NPCL Periphery)	Rs./kWh	4.12
APPC including Transmission (Inter + Intra) (at NPCL Periphery)	Rs./kWh	4.77
ABR	Rs./kWh	7.22
ACoS	Rs./kWh	6.43

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 2022-23 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 the MYT Regulation, 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 2020-21. Based on the above, the Petitioner has done the allocation as under:

Particulars	Wheeling Cost	Retailing Cost	Total
R&M Expenses	87%	13%	100%
Employees Expenses	58%	42%	100%
A&G Expenses	61%	39%	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	**19%**	**81%**	**100%**

7.3.4 Further, the Petitioner submitted the allocations of ARR into wheeling and retail supply for FY 2022-23 as shown in the Table below:

TABLE 7-1: WHEELING AND RETAIL SUPPLY ARR SUBMITTED BY THE PETITIONER FOR FY 2022-23

Particulars	Allocation %			Allocation			
	Wheeling	Energy	Supply	Wheeling	Energy	Supply	Total
Cost of Power Procurement	0%	100%	0%	-	1,509.88	-	1,509.88
Transmission and Load Dispatch Charges	0%	100%	0%	-	242.82	-	242.82
Net O&M Expenses				**278.07**	**-**	**56.05**	**334.12**
Net Employee cost	58%	0%	42%	39.59	-	28.87	68.46
Net A&G expenses	61%	0%	39%	14.04	-	8.79	22.83
R&M expenses	87%	0%	13%	63.19	-	9.04	72.23

Particulars	**Allocation %**			**Allocation**			
	Wheeling	**Energy**	**Supply**	**Wheeling**	**Energy**	**Supply**	**Total**
Smart Metering OPEX	87%	0%	13%	12.78	-	1.83	14.61
Net Interest & Finance charges	100%	0%	0%	77.43	-	0.00	77.43
Depreciation	89%	0%	11%	61.05	-	7.30	68.34
Carrying cost	98%	0%	2%	9.99	-	0.22	10.22
Gross Expenditure				**278.07**	**1,752.70**	**56.05**	**2,086.82**
Provision for Bad & Doubtful debts	0%	0%	100%	-	-	47.65	47.65
Provision for Contingency Reserve	0%	0%	100%	-	-	5.15	5.15
Total net expenditure with provisions				**278.07**	**1,752.70**	**108.85**	**2,139.62**
Add: Return on Equity	90%	0%	10%	73.56	-	7.96	81.53
Add : Income Tax	90%	0%	10%	24.74	-	2.68	27.42
Add : Other Item	0%	0%	100%	-	-	4.61	4.61
Less: Non-Tariff Income	90%	0%	10%	-	-	-	-
Aggregate Revenue Requirement (ARR)				**376.38**	**1,752.70**	**124.10**	**2,253.18**

7.3.5 Based on the above, the wheeling charges submitted by the Petitioner for FY 2022-23 is as shown in the Table below:

TABLE 7-2: WHEELING CHARGES SUBMITTED BY THE PETITIONER FOR FY 2022-23

Sl. No	**Particulars**	**Units**	**Claimed**
1	Wheeling ARR	Rs. Crores	376.38
2	Retail sales	MU	2780.19
3	Average Wheeling charge	Rs./kWh	1.35

7.3.6 The voltage wise wheeling charges submitted by the Petitioner for FY 2022-23 is as shown in the Table below:

Sl. No.	**Particulars**	**Units**	**% of Avg. wheeling charge**	**Claimed**
1	Connected at 11 kV			
i	Long Term	Rs./kWh	100%	1.62
ii	Medium Term	Rs./kWh	100%	1.62
iii	Short Term	Rs./kWh	100%	1.62
2	Connected above 11 kV			
i	Long Term	Rs./kWh	100%	0.84
ii	Medium Term	Rs./kWh	100%	0.84
iii	Short Term	Rs./kWh	100%	0.84

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 2022-23 as shown in the Table below:

TABLE 7-3: WHEELING AND RETAIL SUPPLY ARR APPROVED BY THE COMMISSION FOR FY 2022-23 (RS. CRORE)

Particulars	Allocation %		Allocation FY 2022-23		
	Wheeling	Supply	Wheeling	Supply	Total
Power Purchase Exp. (incl PGCIL charges)	0%	100%	0.00	1323.80	1323.80
Transmission Charge	0%	100%	0.00	207.56	207.56
Employee cost	58%	42%	19.04	14.04	33.08
A&G expenses	61%	39%	8.60	5.50	14.10
R&M expenses	87%	13%	35.94	5.37	41.31
Interest & Finance charges	100%	0%	56.31	0.00	56.31
Depreciation	89%	11%	42.21	5.22	47.43
Income Tax	90%	10%	17.58	1.95	19.54
Gross Expenditure			**179.69**	**1563.45**	**1743.13**
Expense capitalization			**8.06**	**5.94**	**14.00**
Employee cost capitalized	58%	42%	8.06	5.94	14.00
Net Expenditure			**171.63**	**1557.50**	**1729.13**
Provision for Bad & Doubtful debts	0%	100%	0.00	22.51	22.51
Miscellaneous Expenses	100%	0%	0.00	0.00	0.00
Total net expenditure with provisions			**171.63**	**1580.01**	**1751.64**
Add: Return on Equity	90%	10%	52.28	5.81	58.09
Less: Non Tariff Income	90%	10%	20.69	2.30	22.99
Annual Revenue Requirement (ARR)	11%	89%	**203.22**	**1583.52**	**1786.74**

7.3.8 Based on the above, the wheeling charge for FY 2022-23 has been worked out by the Commission as shown in the Table below:

TABLE 7-4: WHEELING CHARGE APPROVED BY THE COMMISSION FOR FY 2022-23

Particulars	Units	Approved
Wheeling ARR	Rs. Crore	203.22
Retail sales	MU	2780.19
Average Wheeling charge	Rs./kWh	0.7310

7.3.9 The Commission has approved the ACoS of Rs. 6.43 / kWh for FY 2022-23 compared to Rs. 6.10/ kWh approved for FY 2021-22 vide Tariff Order dated August 26, 2021.

7.3.10 The wheeling charges determined above shall not be payable if the Open Access customer is availing supply directly through the State transmission network.

7.3.11 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 2021-22 dated August 26, 2021 had approved the cost of supply for FY 2021-22 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 2022-23 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 2022-23 at existing and proposed tariff is as shown in the Table below:

TABLE 7-5: CSS AS SUBMITTED BY THE PETITIONER FOR FY 2022-23 (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)	8.15	0.80	0.03	5.80	2.43%	6.78	1.37
-----11 kV -----								
2	Non-Industrial Bulk Load (HV-1)	10.25	1.58	0.04	5.80	6.02%	7.78	2.47
3	Large & Heavy Power (HV-2)	8.15	1.58	0.04	5.80	6.02%	7.78	2.47
----- LT -----								
4	Domestic Light, Fan & Power (LMV-1)	6.83	2.06	0.04	5.80	19.80%	9.32	-
5	Non - Domestic Light, Fan & Power (LMV-2)	11.56	2.06	0.04	5.80	19.80%	9.32	2.23
6	Public Lamps (LMV-3)	9.33	2.06	0.04	5.80	19.80%	9.32	0.01
7	Light ,Fan & Power for Institutions (LMV-4)	8.49	2.06	0.04	5.80	19.80%	9.32	-
8	Small Power for Private Tubewell (LMV-5)	2.09	2.06	0.04	5.80	19.80%	9.32	-
9	Small and Medium Power (LMV-6)	10.03	2.06	0.04	5.80	19.80%	9.32	0.71
10	Public Water Works (LMV-7)	10.09	2.06	0.04	5.80	19.80%	9.32	0.77
11	Temporary Supply (LMV-9)	10.06	2.06	0.04	5.80	19.80%	9.32	0.74
12	Temporary Supply (LMV-11)	7.44	2.06	0.04	5.80	19.80%	9.32	-
13	State Tube Wells (LMV-8)	14.81	2.06	0.04	5.80	19.80%	9.32	5.49

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 2022-23 (DC)

Particulars	Units	Approved
Supply ARR (excluding Power Purchase & Transmission charges) (A)	Rs. Crore	52.16
Retail sales (B)	MU	2780.19
Average Supply/Distribution charge (DC) ((A/B)*10)	Rs./kWh	0.19

TABLE 7-7: INTRA-STATE TRANSMISSION CHARGES FOR COMPUTATION OF 'D' FOR FY 2022-23 (TC)

Particulars	Units	Approved
Transmission Cost (A)	Rs. Crore	69.55
Energy Handled in Open Access (Retail Sales) (B)	MU	2780.19
Average Transmission Charge (TC) ((A/B)*10)	Rs./kWh	0.2502

TABLE 7-8: AVERAGE TRANSMISSION CHARGE (EXCLUDING INTRA) FOR COMPUTATION OF 'D' FOR FY 2022-23 (PC)

Particulars	Units	Approved
Transmission Cost (A)	Rs. Crores	138.01
Energy Handled in Open Access (Retail Sales) (B)	MU	2780.19
Average Transmission Charge (excluding UPPTCL) (PC) ((A/B)*10)	Rs./kWh	0.4964

TABLE 7-9: AVERAGE OF TRANSMISSION, DISTRIBUTION & WHEELING CHARGES, APPLICABLE TO RELEVANT VOLTAGE LEVEL FOR FY 2022-23 (D = PC + TC + DC + WC)

Particulars	Units	Approved
PC + TC + DC + WC upto 132 kV	Rs./kWh	1.67
TC + PC (above 132 kV)	Rs./kWh	0.75

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 2022-23

Voltage level	Loss (%)
33 kV and above	2.43%
11 kV	6.02%
LT	19.80%

Voltage level	Loss (%)
Overall total loss	8.05%

7.4.6 The Commission directed the Petitioner to submit the voltage wise wheeling charges and losses as per Format P1 for FY 2020-21, FY 2021-22 and FY 2022-23 for voltage level 220 kV, 132 kV, 33 kV, 11 kV, LT and to reconcile the same with cross-subsidy calculation at various voltage levels in Format 40A.

7.4.7 In reply, the Petitioner submitted the reconciliation of losses as submitted in Format P1 and Format 40A with audited cost records as shown in the Table below:

TABLE 7-11: RECONCILIATION OF LOSSES AS SUBMITTED BY THE PETITIONER

Sl. No.	Particulars	U.o.M	Ref.	33 kV & above	11 kV	LT
A	**FY 2020-21**					
1	**Losses as per Cost Records (Refer Table-6 , Page-10)**					
I	Import	MU	a	2,196.36	1,207.34	581.06
Ii	Sales	MU	b	964.90	588.37	458.87
Ii	Loss	MU	c=a-b	24.12	37.91	122.27
Iii	**Loss% as per Cost Records**	**%**	**d=c/(b+c)**	**2.44%**	**6.05%**	**21.04%**
2	**Loss% as per Form-P1**	**%**	**e**	**2.44%**	**6.05%**	**21.04%**
3	**Loss% as per Form-F-40A**	**%**	**f**	**Not applicable for FY 2020-21**		
B	**FY 2021-22**					
1	**Losses as per Cost Records**	**%**	**g**	**Not applicable for FY 2021-22**		
2	**Loss % estimated as per Form-P1**	**%**	**h**	**2.43%**	**6.03%**	**20.16%**
3	**Loss% as per Form-F-40A**	**%**	**i**	**Not applicable for FY 2021-22**		
C	**FY 2022-23**					
1	**Losses as per Cost Records**	**%**	**j**	**Not applicable for FY 2022-23**		
2	**Loss% as per Form-P1**	**%**	**k**	**2.43%**	**6.02%**	**19.80%**
3	**Loss% as per Form-F-40A**	**%**	**l**	**2.43%**	**6.02%**	**19.80%**

7.4.8 With respect to segregation of T & D losses between 220 kV, 132 kV, 33 kV, 11 kV and LT, the Petitioner submitted that currently, the company has received only one application for connectivity at 132 kV from M/s Oppo Mobiles which has been considered in the demand projections for FY 2022-23. M/s Oppo Mobile has been granted connectivity via dedicated 132 kV feeder, constructed at their cost, from UPPTCL's 400/220/132 kV Substation at Sec-148, Noida. The Petitioner submitted that as and when other consumers approach the Company for power supply at 132 kV, the same will be considered for the purpose of preparation of wheeling charge and losses at that time. In view of the above, the summary of T&D Loss & wheeling charges after segregation of 132 kV losses is as shown in the Table below:

TABLE 7-12: SUMMARY OF T&D LOSS AND WHEELING CHARGES AFTER SEGREGATION OF 132 KV LOSSES AS SUBMITTED BY THE PETITIONER

Voltage	Technical Loss	Import	Sales	Loss	Loss
	%	MU	MU	MU	%
FY 2020-21					
132 KV	-	-	-	-	-
33 KV	2.29%	989.02	964.90	24.12	2.44%
11 KV	1.88%	626.28	588.37	37.91	6.05%
LT	2.10%	581.06	458.78	122.27	21.04%
Total	**6.27%**	**2,196.36**	**2,012.05**	**184.30**	**8.39%**
FY 2021-22					
132 KV	-	-	-	-	-
33 KV	2.29%	1,164.70	1,136.37	28.33	2.43%
11 KV	1.88%	737.42	692.96	44.46	6.03%
LT	2.10%	684.54	546.51	138.02	20.16%
Total	**6.27%**	**2,586.66**	**2,375.84**	**210.82**	**8.15%**
FY 2022-23					
132 KV	0.25%	72.21	72.03	0.18	0.25%
33 KV	2.34%	1,288.33	1,256.29	32.04	2.49%
11 KV	1.88%	861.65	810.03	51.61	5.99%
LT	2.10%	801.41	641.84	159.57	19.91%
Total	**6.57%**	**3,023.59**	**2,780.19**	**243.40**	**8.05%**

7.4.9 Accordingly, based on above losses, the wheeling charges for FY 2022-23 submitted by the Petitioner is as shown in the Table below:

TABLE 7-13: WHEELING CHARGES FOR FY 2022-23 AS SUBMITTED BY THE PETITIONER

Allocation of Energy	132 kV	33 kV	11 kV	LT	Total
Energy for purchase (MU)	72.21	1288.33	861.65	801.41	3023.59
Energy sales (MU)	72.03	1256.29	810.03	641.84	2780.19
Energy Cost (Rs./ kWh)	**5.81**	**5.86**	**6.05**	**7.55**	**6.30**
Wheeling (Rs./ kWh)	0.06	0.94	1.49	2.16	1.36

Allocation of Energy	**132 kV**	**33 kV**	**11 kV**	**LT**	**Total**
Retail (Rs./ kWh)	0.00	0.02	0.03	1.85	0.45
Total (Rs./ kWh)	**0.06**	**0.96**	**1.52**	**4.00**	**1.80**
Cost of service (Rs./ kWh)	**5.87**	**6.82**	**7.57**	**11.56**	**8.11**

7.4.10 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.**

7.4.11 Accordingly, voltage wise loss at each voltage level considered for computation of Cross Subsidy Surcharge as under:

TABLE 7-14: VOLTAGE WISE LOSSES APPROVED BY THE COMMISSION FOR COMPUTATION OF CSS FOR FY 2022-23

Particulars	Loss Levels
Inter State Transmission Loss (PGCIL)	3.05%
Intra State Transmission Loss (UPPTCL)	3.27%
Distribution Loss above 132 kV	0.00%
Distribution Loss above 33 KV (132 kV, 66 kV)	0.00%
Distribution Loss at 33 kV	1.18%
Distribution Loss at 11 kV	1.58%
Overall Distribution Loss	7.70%

7.4.12 As per the formula provided in the MYT Regulations, 2019 the details of Cost of Supply for the category of consumers at various voltage levels is given below:

TABLE 7-15: COST OF SUPPLY AS COMPUTED BY THE COMMISSION FOR FY 2022-23 (RS./KWH)

S No.	Categories	Wh. Charge (D= PC+TC+DC+WC)	Wt. Avg. Pr. Cost (C)	Wt. Avg Power Purchase Variable Cost (VC)	Wt. Avg. Pr. 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	0.75	1.02	3.10	4.12	3.05%	3.27%	0.00%	0.00	5.14
2	HV Categories above 33 KV (132, 66kV)	1.67	1.02	3.10	4.12	3.05%	3.27%	0.00%	0.00	6.06
3	HV Categories at 33 KV	1.67	1.02	3.10	4.12	3.05%	3.27%	1.18%	0.00	6.11
4	HV Categories at 11 KV	1.67	1.02	3.10	4.12	3.05%	3.27%	1.58%	0.00	6.13

Note: L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level.

TABLE 7-16: CSS COMPUTED BY THE COMMISSION FOR FY 2022-23 (RS./KWH)

Category	Average Billing Rate (ABR)	T = ABR + RS (i.e. Regulatory Surcharge)	Cost of Supply	CSS (Computed)	CSS (as per MYT 19) (with a cap of 20% of T)
HV-1 (Supply at 11 kV)	7.50	7.50	6.13	1.37	1.37
HV-1 (Supply above 11 kV)	9.31	9.31	6.11	3.20	1.86
HV-2 (Supply at 11 kV)	7.55	7.55	6.13	1.42	1.42
HV-2 (Supply above 11 kV and upto 66 kV)	7.05	7.05	6.11	0.94	0.94
HV-2 (Supply above 66 kV and upto 132 kV)					
HV-2 (Supply above 132 kV)	6.24	6.24	5.14	1.10	1.10

7.4.13 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 2022-23 is as shown in the Table below:

TABLE 7-17: CSS APPROVED BY THE COMMISSION FOR FY 2022-23 (RS./KWH)

Category	Claimed by the Petitioner	Computed	Approved
	A	B	Minimum of A ,B
HV-1 (Supply at 11 kV)	2.47	1.37	1.37
HV-1 (Supply above 11 kV)	-	1.86	1.86
HV-2 (Supply at 11 kV)	0.37	1.42	0.37
HV-2 (Supply above 11 kV and upto 66 kV)	1.37	0.94	0.94
HV-2 (Supply above 66 kV and upto 132 kV)	-		
HV-2 (Supply above 132 kV)	-	1.10	1.10

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 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.

xii) 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

7.5.3 From the above proposed amendment, the Company 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.

7.5.4 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.

7.5.5 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.

7.5.6 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.

7.5.7 Therefore, the Company expects migration of consumers to Open Access from its licensed area. So far, the Company has granted Open Access for 4.25 MW (long term Open Access) while applications of around 22 MW are pending for approval. Such migration of 26.25 MW would result in stranded Capacity with the Company from our already tied-up long term and medium term agreements.

7.5.8 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.

7.5.9 Accordingly, to demonstrate the loss of revenue due to open access, the Company has considered a case where considering 26.25 MW power from the Company's long term PPA i.e. with M/s DIL to remain stranded in FY 2022-23. The details of stranded energy are as follows:

TABLE 7-18: STRANDED CAPACITY AND ENERGY AS SUBMITTED BY THE PETITIONER FOR FY 2022-23

Particular	UoM	Value
Stranded Capacity	MW	26.25
No of Days	Nos	365
No. of Hours	Nos	24
Stranded Energy	MU	229.95

7.5.10 The average fixed cost of the power purchased from M/s DIL on the basis of projected during the period from April, 2022 to March 2023 is considered for calculation of stranded energy cost as shown in the Table below:

TABLE 7-19: COST OF STRANDED POWER AS SUBMITTED BY THE PETITIONER FOR FY 2022-23

Sl. No.	Particulars	U.o.M	Ref.	Amount
1	Stranded Energy	MU	a	229.95

Sl. No.	Particulars	U.o.M	Ref.	Amount
2	Weighted Average Fixed Cost for Long Term Power Procurement for FY 2022-23 including Transmission Charges	Rs. /unit	b	2.58
3	Total Cost of Stranded Power due to OA Consumer	Rs. Crore	c=a x b / 10	59.44

7.5.11 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

7.5.12 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.

7.5.13 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.

7.5.14 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

7.5.15 The Commission observed that the Petitioner has submitted stranded capacity of 26.25 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, The Commission directed NPCL to justify the calculation of Additional Surcharge for FY 2022-23.

7.5.16 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'22 to Mar'23 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'22 to Mar'23 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 2022-23)

S. No.	***Month***	***MUs)***
1	*Apr-22*	*4.93*
2	*May-22*	*2.64*
3	*Jun-22*	*1.97*
4	*Jul-22*	*2.57*
5	*Aug-22*	*3.36*
6	*Sep-22*	*3.07*
7	*Oct-22*	*0.39*
8	*Nov-22*	*3.17*
9	*Dec-22*	*2.12*
10	*Jan-23*	*1.45*
11	*Feb-23*	*1.57*
12	*Mar-23*	*1.39*
Total		***28.63***

For the above stranded energy, the Company will be constrained to pay the fixed charges corresponding to its existing 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

S. No.	***Particulars***	***Unit***	***Calculation***	***Value***
1	*Stranded Power at Consumer Periphery*	*MUs*	*A=A-Losses%*	*27.94*
2	*Energy received from LT/MT at Regional Periphery @ 85%*	*MUs*	*B*	*1274.05*

3	*Corresponding Energy at Consumer Periphery*	*MUs*	*C=C-Losses%*	*1163.48*
4	*Billed Fixed Cost including Transmission charges*	*Rs. Cr.*	*D*	*308.25*
5	*Weighted Average Fixed Cost at Consumer Periphery*	*Rs./Unit*	*E=D*10/C*	*2.65*
6	*Total Cost of Stranded Power due to OA Consumers*	*Rs. Cr.*	*F=A*E/10*	*15.73*
7	*Total Open Access Energy at Consumer Periphery*	*MUs*	*G=G-Losses%*	*27.94*
8	***Applicable Additional Surcharge on the Open Access Units during the period***	***Rs./Unit***	***H=F*10/G***	***2.65***
Note: 1) ASC has been calculated at Consumer's periphery *2) Highest cost power as per MOD considered for estimation of stranded energy*				

Unquote

7.5.17 The Commission has taken note of the submission of the Petitioner. It is observed that approximately 40% 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.

7.5.18 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.

7.5.19 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 reduction 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 2022-23 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 and 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 Licensee, 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 2022-23. 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 The Commission vide letter no. UPERC/D(T)/2022-365 dated June 23, 2022 to GoUP sought the details of subsidy for consumers of LMV-1 & LMV-5 categories of NPCL as is made available for 5 State Discoms. Further, GoUP vide letter no. 954/24-1-2022-1307/2020 dated July 19, 2022 informed that the details of subsidy provided for FY 2022-23 vide letter no. 703/24-1-2022-1307/2020 dated June 07, 2022 shall be applicable to the 5 State Discoms only. It also informed that ABR of NPCL in previous years (for FY 2020-21 and FY 2021-22) is greater than its ACOS in respective ARRs. In the proposed ARR for FY 2022-23 also ABR is greater than ACOS. Therefore, NPCL is in regulatory surplus according to current ARR / Tariff filling.

8.1.8 Further, the Commission has rationalized the Tariff Structure of the State Discoms which has been discussed in detail in the in the ARR/ Tariff Order for FY 2022-23 of the State Discoms. The Rate Schedule as applicable to State Discoms shall also be applicable to NPCL consumers. Accordingly, the Commission has approved tariffs for the various categories / sub-categories of consumers which have been detailed in Rate Schedule for FY 2022-23 annexed at the end of this Tariff Order. **Taking into consideration the surplus, all the Consumers of the NPCL 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. 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 ELECTRICTY 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.

8.1 GREEN POWER TARIFF

The Commission has approved a Green Energy Tariff of Rs. 0.54 per kWh for State Discoms, the same shall also be applicable for NPCL along with the other terms & conditions as discussed in the ARR/ Tariff Order for FY 2022-23 of the State Discoms.

8.3 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 AND REVENUE GAP / (SURPLUS)

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 2022-23 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 2022-23 (RS. CRORE)

Sl. No.	Category	Sales	Revenue	Average Billing Rate (ABR)
		(MU)	(Rs. Crore)	(Rs./kWh)
1	Domestic (LMV-1)	852.78	582.25	6.83
2	Commercial (LMV-2)	47.57	54.98	11.56
3	Public Lighting (LMV-3)	37.87	35.34	9.33
4	Public Institutions (LMV-4)	16.97	14.40	8.49
5	Private Tube Wells (LMV-5)	20.45	4.27	2.09
6	Small & Medium Power (LMV-6)	116.96	117.33	10.03
7	Public Water Works (LMV-7)	26.69	26.92	10.09
8	State Tube Wells (LMV-8)	0.07	0.11	14.81
9	Temporary Supply (LMV-9)	52.29	52.60	10.06
10	Electric Vehicle Charging (LMV-11)	5.19	3.86	7.44
11	Non Industrial Bulk Supply (HV-1)	333.37	341.70	10.25
12	Heavy and Large Industry (HV-2)	1,269.96	1,035.10	8.15
	Total	**2,780.19**	**2,268.87**	**8.16**

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 2020-21 is as shown in the Table below:

TABLE 9-2: CARRYING COST FOR FY 2020-21 AS SUBMITTED BY THE PETITIONER (RS. CRORE)

Sl. No.	Particulars	Ref.	Approved	Actual
1	Regulatory Assets at the beginning of Year	a	276.55	**306.25**
2	(Recovery) of Regulatory Assets during the year	b	(402.86)	(189.69)
3	Closing Regulatory Assets (before Carrying cost for the year)	c=a+b	(126.31)	**116.57**
4	Average Regulatory Asset	d=(a+b)/2	75.12	211.41
5	Applicable Interest Rate for Working Capital Finance	e	10.65%	9.57%
6	**Carrying Cost of Regulatory Asset**	**f=d x e**	**-**	**20.23**

9.1.4 The Petitioner submitted that the above carrying cost has been computed considering the following:

- Carrying cost has been claimed at SBI – 1 Year MCLR + 2.50% as considered for Working Capital Facility i.e. 9.57%.
- 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 As discussed in the Tariff Philosophy Chapter of this Tariff Order, the Commission has rationalised the Tariff structure. Further, while rationalising the Commission has ensured that no additional burden is to be imposed on/ impacted to any class of consumers and accordingly Tariff Rates have been approved in this Tariff Order. The Commission has computed the revenue as per the rationalised structures approved in this Tariff Order, Regulatory Discount and the approved Billing Determinants for FY 2022-23. The following Tables summarize the revenue approved by the Commission for FY 2022-23 at approved Tariff Rates with regulatory discount.

TABLE 9-3: REVENUE APPROVED FOR FY 2022-23

Particulars	**Sales**	**Revenue**	**Average Billing Rate (ABR)**
	(MU)	**(Rs. Crore)**	**(Rs/kWh)**
LMV-1: Domestic Light, Fan & Power	852.78	532.83	6.25
LMV-2: Non Domestic Light, Fan & Power	47.57	48.49	10.19
LMV-3: Public Lamps	37.87	34.40	9.08
LMV-4: Institutions	16.97	15.21	8.96
LMV-5: Private Tube Wells	20.45	3.77	1.84
LMV 6: Small and Medium Power	116.96	87.90	7.52
LMV-7: Public Water Works	26.69	22.99	8.59
LMV-8: STW and Pumped Canals	0.07		
LMV-9: Temporary Supply	52.29	48.81	9.33
LMV-11: Electric Vehicle Charging	5.19	3.41	6.57
HV-1: Non Industrial Bulk Power	333.37	291.16	8.73
HV-2: Large and Heavy Power	1269.96	917.91	7.23
Subtotal	**2780.19**	**2,006.88**	**7.22**

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 2022-23. The revenue at tariff determined in this Order has already been approved in the ARR chapter for FY 2022-23. The estimated gap/surplus for FY 2022-23 of NPCL is as shown in the Table below:

TABLE 9-4: ESTIMATION OF ARR GAP/(SURPLUS) FOR FY 2022-23 (RS. CRORE)

Particulars	**True-up (FY 2020-21)**			**APR (FY 2021-22)**			**ARR (FY 2022-23)**	
	Approved in Tariff Order dated 04.12.2020	**True-Up Petition for FY 2020-21**	**Approved**	**Approved in Tariff Order dated 26.08.2021**	**APR Petition for FY 2021-22**	**Approved**	**ARR Petition for FY 2022-23**	**Approved**
Opening (i.e., closing of last year)	**(4.28)**	**306.25**	**(385.84)**	(548.99)	136.80	(870.73)	152.25	(951.03)
Gap/(Surplus) during the year	(402.87)	(189.69)	(427.51)	(540.57)	2.31	2.31	174.32	(220.13)
Closing Gap/(Surplus)	**(407.15)**	**116.57**	**(813.35)**	**(1,089.55)**	**139.11**	**(868.42)**	**326.57**	**(1,171.16)**
Carrying cost rate (%) @ IWC	10.65%	9.57%	9.57%	10.65%	9.50%	9.50%	9.50%	9.50%
Carrying cost	-	20.23	(57.38)	(87.25)	13.11	(82.61)	22.74	(50.40)
Cumulative Gap/ (Surplus)	**(407.15)**	**136.80**	**(870.73)**	**(1,176.81)**	**152.25**	**(951.03)**	**349.31**	**(1,221.56)**

9.1.7 As shown in the above table, the Commission has computed the overall surplus of

Rs. 1,221.53 Crore for FY 2022-23 taking into consideration true-up of FY 2020-21 and APR of FY 2021-22.

9.1.8 Further, it has been observed that DIL has filed the following Petitions before the Commission:

- MYT Petition of DIL for True-Up of FY 2016-17 to FY 2018-19 Petition No. 1500 of 2019 (Order issued on November 22, 2021).
- MYT Petition of DIL for ARR of FY 2019-20 to FY 2023-24 Petition No. 1531 of 2019 (proceedings are still going on).

9.1.9 The impact of the above Orders and proceedings of ARR of MYT Petition for FY 2019-20 to FY 2023-24, Change in Law, additional coal etc. will have an impact on the power purchase cost of the Petitioner and its revenue gap/surplus. The Petitioner has submitted the impact of the Commission's Order dated November 22, 2021 as under:

TABLE 9-5: IMPACT OF COMMISSION'S ORDER DATED NOVEMBER 22, 2021 IN PETITION NO. 1500 OF 2019 AS CLAIMED BY THE PETITIONER (RS. CRORE)

Particulars	Ref.	FY 2016-17	FY 2017-18	FY 2018-19	Total
Cost of Power purchased from M/s DIL Trued-up in NPCL's Tariff Orders on provisional basis	a	37.11	447.36	416.74	901.21
Cost of Power Purchased from M/s DIL Trued-up in M/s DIL's Truing-up Order dt. 22.11.21	b	37.95	486.64	499.07	1023.66
Additional Cost pursuant to DIL's Truing-up Order dt. 22.11.21	**c=b-a**	**0.84**	**39.28**	**82.33**	**122.45**
Carrying Cost for FY 2016-17 @ 14.99%	d	0.06	0.00	0.00	0.06
Carrying Cost for FY 2017-18 @ 14.57%	e	0.12	2.86	0.00	2.98
Carrying Cost for FY 2018-19 @ 14.57%	f	0.12	5.72	6.00	11.84
Carrying Cost for FY 2019-20 @ 14.46%	g	0.12	5.68	11.90	17.70
Carrying Cost for FY 2020-21 @ 9.57%	h	0.08	3.76	7.88	11.72
Carrying Cost for FY 2021-22 @ 9.50%	i	0.08	3.73	7.82	11.63
Total Carrying Cost	**j= Σ (d to i)**	**0.59**	**21.75**	**33.66**	**55.94**
(i) Carrying cost on Additional Coal & Change-in-Law	k				22.63
(ii) Additional O&M	l				2.72
Total Additional Cost pursuant to Truing Up Order dated 22.11.2021	**n=c+j+k+l**				**203.73**

9.1.10 Further, the Petitioner requested the Commission to allow the additional cost of power purchase from DIL for FY 2019-20 as shown in Table below:

TABLE 9-6: ADDITIONAL POWER PURCHASE COST OF DIL FOR FY 2019-20 AS SUBMITTED BY THE PETITIONER (RS. CRORE)

Particulars	Ref.	FY 2019-20
Power purchase cost of DIL Trued-up in NPCL's Tariff Orders on provisional basis	a	401.67
DIL Power purchase cost as Billed and Claimed by NPCL	b	522.47
Additional Cost	**c=b-a**	**120.80**
Carrying Cost for FY 2019-20 @ 14.46%	d	8.73
Carrying Cost for FY 2020-21 @ 9.57%	e	11.56
Carrying Cost for FY 2021-22 @ 9.50%	f	11.48
Total Carrying Cost	**g=Σ (d to f)**	**31.77**
Total Additional Cost including Carrying Cost	**h=c+g**	**152.57**

9.1.11 The Commission in its Order dated November 22, 2021 in Petition No. 1500 of 2019 ruled as under:

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 Regulation 6(9) of Generation Tariff Regulations 2014.

2.6.3 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

Quote

2.6.6 DIL shall also be entitled to carrying cost of Rs. 13.62 Crs on the claims due to procurement and use of Additional Coal for FY 2017-18 & FY 2018-19 as per Commission's order dated 19.03.2020 and Rs. 9.01 Crs on claims under Change in

Law events which has been approved by the Commission in its order dated 29.05.2020

Unquote

9.1.12 **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.**

9.1.13 Accordingly, the Commission has considered the impact of the Commission's Order dated November 20, 2021 in Petition No. 1500 of 2019 as under:

TABLE 9-7: IMPACT OF COMMISSION'S ORDER DATED NOVEMBER 22, 2021 IN PETITION NO. 1500 OF 2019 CONSIDERED BY THE COMMISSION (RS. CRORE)

Year	Claimed by NPCL in True up	Considered by Commission in True up of NPCL	Approved by Commission in true-up of DIL	Impact of true-up of DIL
	(A)	(B)	(C)	(C)=(B)-(A)
FY 2016-17	37.11	37.11	37.95	0.84
FY 2017-18	447.36	447.36	486.64	39.28
FY 2018-19	515.61	416.74	499.07	82.33
Total	**1000.08**	**901.21**	**1023.66**	**122.45**
Approved carrying cost on the claims due to procurement and use of additional coal for FY 2016-17 to FY 2018-19				22.63
Approved carrying cost on claims under change in law events for FY 2016-17 to FY 2018-19				2.72
				147.80*

** Subject to the prudence check by the Commission while truing up of FY 2021-22.*

9.1.14 Further, the impact of tariff determination in Petition No. 1531 of 2019 (currently proceedings are going on) has been provisionally computed as under:

TABLE 9-8: IMPACT OF TARIFF DETERMINATION IN PETITION NO. 1531 OF 2019 PROVISIONALLY CONSIDERED BY THE COMMISSION (RS. CRORE)

Year	**True Up / APR / ARR**	**Claimed by NPCL in True up / APR / ARR**	**Considered by Commission in True up / APR / ARR**	**Claimed by DIL in MYT Petition**	**Impact of MYT Petition of DIL**
		(A)	**(B)**	**(C)**	**(D)=(C)-(B)**
FY 2019-20	True Up	522.47	401.67	571.15	169.48
FY 2020-21	True Up	602.10	516.32	587.77	71.45
FY 2021-22	ARR	598.42	452.69	598.67	145.98
FY 2022-23	ARR	610.40	511.53	610.37	98.84
Total		**2333.38**	**1882.21**	**2367.96**	**485.75**

9.1.15 Further, the Petitioner had claimed the Change in Law and additional coal cost of power purchase from DIL in the true-up of FY 2020-21 which was not considered by the Commission in the true-up of FY 2020-21 for the Petitioner. The same has been provisionally considered in the estimation of revenue gap/surplus for FY 2022-23 and shall be subject to true up of DIL.

9.1.16 Therefore, the total impact of DIL Petitions and upcoming Orders on power purchase would be as under:

TABLE 9-9: IMPACT OF DIL PETITIONS CONSIDERED BY THE COMMISSION

Particulars	**Impact computed**
Impact of true-up of DIL for FY 2016-17 to FY 2018-19	147.80
Impact of MYT Order of DIL for FY 2019-20, FY 2020-21, FY 2021-22 and FY 2022-23	485.75
Impact of Change in Law / additional charges	8.93
Total	**642.48**

9.1.17 Based on the above, the net revenue Gap/(Surplus) for FY 2022-23 is as under:

TABLE 9-10: ESTIMATION OF REVENUE GAP/(SURPLUS) FOR FY 2022-23 (RS. CRORE)

Particulars	**Revenue Gap/(Surplus)**
Revenue Gap/(Surplus) approved for FY 2022-23	**(1221.56)**
Impact of DIL (provisionally considered)	642.48
Net revenue Gap/(Surplus)	**(579.08)**

9.1.18 The surplus of Rs. 579.05 Crore for FY 2022-23 at the approved revenue will be treated appropriately at the time of next tariff proceedings. Further, there are few matters and appeals pending in various courts filed by NPCL against the

Commission's Orders, whose impact may alter the ARR of the Petitioner of those respective years.

9.1.19 The computations of ARR and Revenue for FY 2022-23 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 Table below summarizes the per unit revenue realization (average billing rate) as a percentage of ACOS. 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 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.

Consumer Sub-Category	**Average Billing Rate**	**(ABR – ACOS) as % of ACOS (+/-)**
	Rs. / kWh	
LMV-1: Domestic Light, Fan & Power	6.25	-2.78%
LMV-2: Non-Domestic Light, Fan & Power	10.19	58.61%
LMV-3: Public Lamps	9.08	41.32%
LMV-4: Light, Fan & Power for Institutions	8.96	39.45%
LMV-5: Private Tube Wells/ Pumping Sets	1.84	-71.34%

Consumer Sub-Category	**Average Billing Rate**	**(ABR – ACOS) as % of ACOS (+/-)**
	Rs. / kWh	
LMV 6: Small and Medium Power up to 100 HP (75 kW)	7.52	16.94%
LMV-7 & 8: Public Water Works & LMV, State Tube Wells & Pump Canals up to 100 HP	8.59	33.67%
LMV-9: Temporary Supply	9.33	45.23%
LMV-11: Electrical Vehicles	6.57	2.23%
HV-1: Non-Industrial Bulk Loads	8.73	35.90%
HV-2: Large and Heavy Power above 100 BHP (75 kW)	7.23	12.46%
Grand Total	7.22	12.32%
ACOS	**6.43**	

9.2.2 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.

9.2.3 Analysis of few parameters is depicted below:

TABLE 9-11: SUMMARY OF FY 2022-23 (RS. CRORE)

Particulars	**Units**	**Value**
Total sales	MU	2780.19
Revenue from Tariff	Rs. Crore	2229.86
Total power purchase	MU	3012.12
Total power purchase cost	Rs. Crore	1531.36
ARR	Rs. Crore	1786.77
APPC without Transmission (at NPCL Periphery)	Rs./kWh	4.12
APPC including Transmission (Inter + Intra) (at NPCL Periphery)	Rs./kWh	4.77
ABR	Rs./kWh	7.22
ACoS	Rs./kWh	6.43

10 DIRECTIVES

10.1 COMPLIANCE WITH THE DIRECTIVES ISSUED IN THE ORDER DATED DECEMBER 04, 2020

10.1.1 The Commission has issued certain directives to the Petitioner in the Order dated December 04, 2020. 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 December 04 2020

Sl. No.	Directive	Status of compliance / Petitioner's reply
1.	The Commission also directs the Licensee to submit the voltage wise (440 V, 11 kV, 33 kV, 66 kV, 132 kV) - Energy Sales and Losses. Also, the now mandatory energy audit report and the cost audit report (prepared in accordance with Companies (Cost Records and Audit) Rules 2014) shall also be submitted every year along with the ARR Petition	The Company has been submitting Cost Audit Report alongwith True-up Petition every year regularly alongwith bifurcation of Voltage-wise sales and T & D losses, as applicable. The voltage-wise sales and T & D losses for FY 2020-21 has been provided in Form P1. The Bureau of Energy Efficiency (BEE) has notified Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021 on October 06, 2021. As per Regulation 3(1), every Discom shall conduct its 1st Annual Energy Audit for FY 2020-21 within 6 months from the date of commencement of the Regulation. Accordingly, NPCL shall submit the energy audit report for FY 2020-21 once the same is completed. From FY 2021-22 onwards, the same will be submitted alongwith the True-up petition.

10.2 COMPLIANCE WITH THE DIRECTIVES ISSUED IN THE ORDER DATED AUGUST 26, 2021

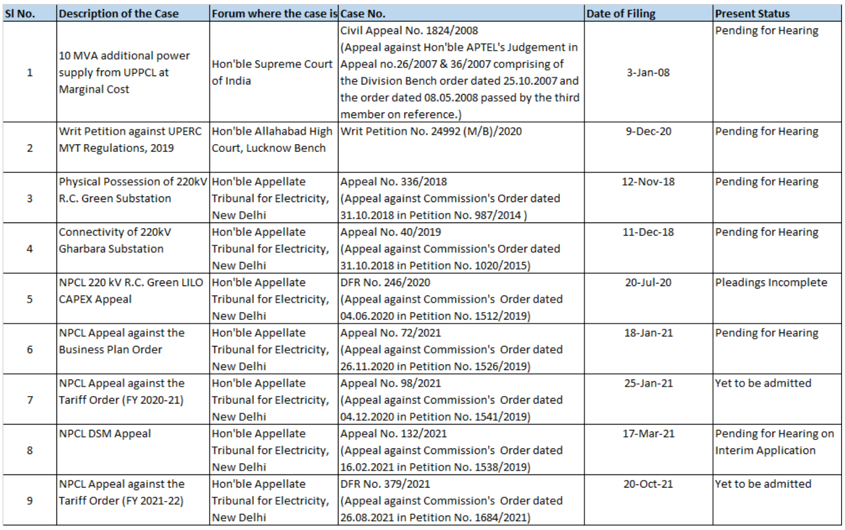
10.2.1 The Commission has issued certain directives to the Petitioner in the Order dated August 26, 2021. The status of compliance submitted by the Petitioner with the same is as shown in the Table below:

Table 10-2: Status of compliance / Petitioner's reply to directive issued in the Order dated August 26, 2021

<table>
<tr><th>Sl. No.</th><th>Directive</th><th>Status of compliance / Petitioner's reply</th></tr>
<tr><td>1.</td><td>The Commission directs the Petitioner to ensure to file its ARR/ tariff Petition on time strictly in accordance with the applicable UPERC MYT Regulations.</td><td>Complied.</td></tr>
<tr><td>2.</td><td>The Commission directs the Petitioner that while filing ARR/ Tariff Petition, it shall upload on its website the Petitions 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.</td><td>Regulation 5.8 of the MYT Regulations 2019 specifies as under:

"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:"***

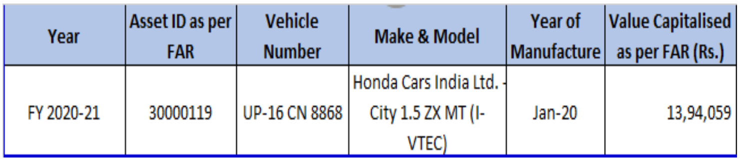
Accordingly, the Company has been publishing Public Notice in the Newspapers and also uploading the same on its website along with all regulatory filings, information, particulars and documents in the manner stipulated by the Commission.

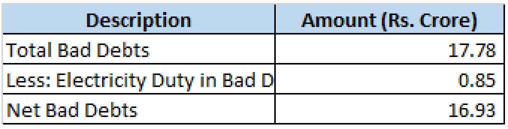
Further, the above is also being uploaded on the website of the Commission.</td></tr>
<tr><td>3.</td><td>Provide the details of all the pending cases filed by NPCL against UPERC in various forums along with the status of the same.</td><td>The details of all pending cases filed by the Company against the orders of the Commission in various forums along with the status of the same is as under:

<table>
<tr><th>Sl No.</th><th>Description of the Case</th><th>Forum where the case is</th><th>Case No.</th><th>Date of Filing</th><th>Present Status</th></tr>
<tr><td>1</td><td>10 MVA additional power supply from UPPCL at Marginal Cost</td><td>Hon'ble Supreme Court of India</td><td>Civil Appeal No. 1824/2008
(Appeal against Hon'ble APTEL's Judgement in Appeal no.26/2007 & 36/2007 comprising of the Division Bench order dated 25.10.2007 and the order dated 08.05.2008 passed by the third member on reference.)</td><td>3-Jan-08</td><td>Pending for Hearing</td></tr>
<tr><td>2</td><td>Writ Petition against UPERC MYT Regulations, 2019</td><td>Hon'ble Allahabad High Court, Lucknow Bench</td><td>Writ Petition No. 24992 (M/B)/2020</td><td>9-Dec-20</td><td>Pending for Hearing</td></tr>
<tr><td>3</td><td>Physical Possession of 220kV R.C. Green Substation</td><td>Hon'ble Appellate Tribunal for Electricity, New Delhi</td><td>Appeal No. 336/2018
(Appeal against Commission's Order dated 31.10.2018 in Petition No. 987/2014)</td><td>12-Nov-18</td><td>Pending for Hearing</td></tr>
<tr><td>4</td><td>Connectivity of 220kV Gharbara Substation</td><td>Hon'ble Appellate Tribunal for Electricity, New Delhi</td><td>Appeal No. 40/2019
(Appeal against Commission's Order dated 31.10.2018 in Petition No. 1020/2015)</td><td>11-Dec-18</td><td>Pending for Hearing</td></tr>
<tr><td>5</td><td>NPCL 220 kV R.C. Green LILO CAPEX Appeal</td><td>Hon'ble Appellate Tribunal for Electricity, New Delhi</td><td>DFR No. 246/2020
(Appeal against Commission's Order dated 04.06.2020 in Petition No. 1512/2019)</td><td>20-Jul-20</td><td>Pleadings Incomplete</td></tr>
<tr><td>6</td><td>NPCL Appeal against the Business Plan Order</td><td>Hon'ble Appellate Tribunal for Electricity, New Delhi</td><td>Appeal No. 72/2021
(Appeal against Commission's Order dated 26.11.2020 in Petition No. 1526/2019)</td><td>18-Jan-21</td><td>Pending for Hearing</td></tr>
<tr><td>7</td><td>NPCL Appeal against the Tariff Order (FY 2020-21)</td><td>Hon'ble Appellate Tribunal for Electricity, New Delhi</td><td>Appeal No. 98/2021
(Appeal against Commission's Order dated 04.12.2020 in Petition No. 1541/2019)</td><td>25-Jan-21</td><td>Yet to be admitted</td></tr>
<tr><td>8</td><td>NPCL DSM Appeal</td><td>Hon'ble Appellate Tribunal for Electricity, New Delhi</td><td>Appeal No. 132/2021
(Appeal against Commission's Order dated 16.02.2021 in Petition No. 1538/2019)</td><td>17-Mar-21</td><td>Pending for Hearing on Interim Application</td></tr>
<tr><td>9</td><td>NPCL Appeal against the Tariff Order (FY 2021-22)</td><td>Hon'ble Appellate Tribunal for Electricity, New Delhi</td><td>DFR No. 379/2021
(Appeal against Commission's Order dated 26.08.2021 in Petition No. 1684/2021)</td><td>20-Oct-21</td><td>Yet to be admitted</td></tr>
</table></td></tr>
<tr><td>4.</td><td>The Commission directs that pre-paid meter / smart meter be installed for all new connections or replacement of faulty meters.</td><td>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 c) Replacement of smart prepaid meter with smart prepaid meter only and prepaid meter with prepaid meter only.</td></tr>
</table>

Sl. No.	Directive	Status of compliance / Petitioner's reply
		The smart or prepaid meters available along with the technical solution are not capable to handle one of the very basic feature of disconnecting or reconnecting the supply remotely through meter itself. Resultantly, all consumers with load of 25 kW and above 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. 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 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 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: ….."* The Commission may 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.

Sl. No.	Directive	Status of compliance / Petitioner's reply
		The Petitioner requested the Commission to allow the Company to install 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.
5.	100% metering is a necessary condition for an efficient distribution network and financial viability of the distribution companies. As per the submission made by the Petitioner, the metering of all the consumers (except LMV-5) shall be completed by end of FY 2020-21. The Petitioner to ensure metering of consumers in LMV-5 category as well because 100% metering of consumers is necessary.	The Company has 97.37% metered consumers as at March, 2021. Though unmetered consumers constitute 2.63% in terms of numbers but in terms of MU and Revenue, the same is at 1.29% and 0.36% 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 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% Thus, BEE has also envisaged that there will be some number of unmetered consumers in the system.
6.	The Petitioner is directed to 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.	Noted for compliance.
7.	The Petitioner is directed to ensure that the actual Power Purchased (MU) ex-bus & at energy delivered at NPCL periphery (MU) along with inter & intra state losses are made part of the Audited Balance Sheet.	Noted for compliance.
8.	The Petitioner is directed to ensure that the actual Power Purchase Cost with detailed break-up of each source, inter-state transmission charges, inter-state transmission charges are made part of the Audited Balance Sheet.	Noted for compliance.
9	The Petitioner directed to ensure 100% feeder metering and DT metering with energy audit within next one year.	The Petitioner submitted that all feeders have been metered. As regards DT metering, necessary action has been initiated and targeting to complete the same for more than 100 kVA DTs by the end of FY 2022-23.

Sl. No.	Directive	Status of compliance / Petitioner's reply
10	The Petitioner directed not to book excess sales under the unmetered categories.	With regards to the booking of sales under unmetered category for FY 2020-21, the Petitioner had made detailed submission in the true-up of FY 2020-21. Further, aggrieved by the Order of the Commission the Petitioner has filed an Appeal before the Hon'ble APTEL which is sub judice. The Petitioner requested the Commission to not disallow the actual sales being booked on realization basis only.
11	Further, all procurements made by the Petitioners should be through Competitive Bidding only.	Complied.
12	The Petitioner 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. 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.	Noted for compliance.
13	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.	Complied
14	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)	Noted for compliance. Further, as regards signing medium term /long term PPAs, aggrieved by the Order of the Commission, the Company has filed an Appeal before the Hon'ble APTEL which is sub judice.

<table>
<tr><th>Sl. No.</th><th>Directive</th><th>Status of compliance / Petitioner’s reply</th></tr>
<tr><td></td><td>and the procure power from GTAM markets or as per Central Government Guidelines and to get prior approval of the Commission wherever requires.</td><td></td></tr>
<tr><td>15</td><td>The Commission directs the Licensee to explore and start a pilot project in it’s area of supply for implementation of peer to peer (P2P) trading of electricity in rooftop solar energy using Blockchain Technology.</td><td>Noted for Compliance</td></tr>
<tr><td>16</td><td>The Commission also directs the Licensee 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.</td><td>Noted for Compliance</td></tr>
<tr><td>17</td><td>The Commission directs the Licensee to comply to all the directives given in this Tariff Order.</td><td>Noted for Compliance</td></tr>
<tr><td>18</td><td>The Commission directs that all the directions of earlier Tariff Orders which have not been complied yet may be complied with immediately.</td><td>The status of earlier directives has been submitted.</td></tr>
<tr><td>19</td><td>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.</td><td>The requisite details are as under:
<table><tr><th>Year</th><th>Asset ID as per FAR</th><th>Vehicle Number</th><th>Make & Model</th><th>Year of Manufacture</th><th>Value Capitalised as per FAR (Rs.)</th></tr><tr><td>FY 2020-21</td><td>30000119</td><td>UP-16 CN 8868</td><td>Honda Cars India Ltd. - City 1.5 ZX MT (I-VTEC)</td><td>Jan-20</td><td>13,94,059</td></tr></table>
Further, as regards purchase of vehicles, aggrieved by the Order of the Commission, the Petitioner has filed an appeal before the Hon’ble APTEL which is sub judice.</td></tr>
<tr><td>20</td><td>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 capitalized. Also provide the list of un-utilized land capitalized.</td><td>The Company has not capitalized any land during FY 2020-21. The updated list of un-utilized land capitalized has been submitted.</td></tr>
<tr><td>21</td><td>Provide copy of all the registries and usage details of all the land capitalized during the year.</td><td>The Company has not capitalized any land during FY 2020-21.</td></tr>
<tr><td>22</td><td>Provide list of Open Access consumers (Long Term, Short Term,</td><td>The details of Open Access consumers during FY 2020-21 are as under:</td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>Directive</th><th>Status of compliance / Petitioner's reply</th></tr>
<tr><td></td><td>Medium Term) along with their consumption.</td><td>
<table>
<tr><th>Sl. No.</th><th>Consumer ID</th><th>Category</th><th>Type of OA</th><th>Total Contracted demand (MVA)</th><th>Total Contracted demand for OA (MVA)</th><th>Consumption (MU)</th></tr>
<tr><td>1</td><td>D S Group</td><td>HV-2</td><td>Long-term</td><td>2.400</td><td>1.125</td><td>**0.13**</td></tr>
<tr><td>2</td><td>H T Media Ltd.</td><td>HV-2</td><td>Long-term</td><td>4.500</td><td>3.125</td><td>**0.13**</td></tr>
</table>
</td></tr>
<tr><td>23</td><td>Wherever the opening values in the new audited account doesn't not match with the closing shown in the previous audited account, the reasons for the same to be provided as part of balance sheet.</td><td>The closing balances of Fixed Asset Register as at 31st March 2020 are tallied with the opening balances of FAR as at 1st April 2020.</td></tr>
<tr><td>24</td><td>Provide detailed breakup of CWIP claimed for the year along with the Petition.</td><td>The Petitioner has submitted the details of opening CWIP, addition, capitalisation and closing CWIP for FY 2020-21 and FY 2021-22.</td></tr>
<tr><td>25</td><td>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.</td><td>The details of electricity duty in bad debts for FY 2020-21 is as under:

<table>
<tr><th>Description</th><th>Amount (Rs. Crore)</th></tr>
<tr><td>Total Bad Debts</td><td>17.78</td></tr>
<tr><td>Less: Electricity Duty in Bad D</td><td>0.85</td></tr>
<tr><td>Net Bad Debts</td><td>16.93</td></tr>
</table>
</td></tr>
<tr><td>26</td><td>Submit the month-wise actual category/sub-category wise Billing Determinants (No. of Consumers, Connected Load & Sales) & actual Revenue for the year along with the Petition.</td><td>The month-wise actual category/sub-category wise Billing Determinants (No. of Consumers, Connected Load & Sales) & actual Revenue for FY 2020-21 have been submitted.</td></tr>
<tr><td>27</td><td>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.</td><td>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 submitted.</td></tr>
<tr><td>28</td><td>Submit the PPA's, Commission's approval and bills of each source from which power is procured, along with the True-up/ARR petition.</td><td>The source wise details of power purchase have been submitted.</td></tr>
<tr><td>29</td><td>Provide the daily load curves and monthly load curves for last year along with the corresponding N2 region demand curves of exchange.</td><td>The typical load curves of a particular day in winter and summer and monthly load curves for FY 2020-21 along with the corresponding IEX N2 load curves have been submitted.</td></tr>
<tr><td>30</td><td>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</td><td>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 have been submitted.</td></tr>
</table>

Sl. No.	Directive	Status of compliance / Petitioner's reply
	incorporate the date of capitalisation and decommissioning in the FAR from next year.	
31	Accordingly, the same is approved. However, the Petitioner is directed to limit its UI and indulge in real time markets.	During FY 2020-21, the net units under Unscheduled Interchange (UI) was merely 0.47% of the total power procured and the Company has been actively participating in IEX including RTM.
32	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.	All details of assets of 132 kV and above have already been provided at the time of True Up of FY 2019-20.
33	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 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.	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 2020-21 onwards has- been computed on SLM basis. The detailed submission has been made in True-up for FY 2020-21.

10.3 DIRECTIVES ISSUED IN THIS ORDER

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.

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.

10.3.3 The Commission directs that pre-paid meter / smart meter be installed for all new connections or replacement of faulty meters.

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.

10.3.5 The Petitioner is directed to ensure 100% feeder metering and DT metering with energy audit within next one year.

10.3.6 The Petitioner is directed not to book excess sales under the unmetered categories.

10.3.7 All procurements made by the Petitioner should be through Competitive Bidding only.

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.

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 Commission. The Petitioner may procure short term power within approved ARR limits through power exchange without prior approval of the Commission.

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.

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.

10.3.12 The Petitioner is directed to submit DSM account details separately from the power purchase along with ARR/ Tariff fillings.

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.

10.3.14 The Petitioner is directed to provide the details of approval of power purchase sources in the annexed format (Annexure – I).

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 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.

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.

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.

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 accordance with Companies (Cost Records and Audit) Rules, 2014) shall also be submitted every year along with the ARR Petition.

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.

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 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.

10.3.22 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 Tariff 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.

(Vinod Kumar Srivastava)	**(Kaushal Kishore Sharma)**	**(Raj Pratap Singh)**
Member (Law)	**Member**	**Chairman**

Place: Lucknow

Date: July 20, 2022

SANJAY KUMAR SINGH

Digitally signed by SANJAY KUMAR SINGH
Date: 2022.07.27
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12 ANNEXURE

12.1 RATE SCHEDULE FOR FY 2022-23

Rate Schedule for FY 2022-23

(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. 0.54 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 Licensees 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 2022-23

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	-

Description	Consumption Range	Fixed Charge	Energy Charge
ii) Metered	Upto 100 kWh / month	Rs. 90.00 / kW / month	Rs. 3.35 / kWh
	101 - 150 kWh / month		Rs. 3.85 / kWh
	151 – 300 kWh / month		Rs. 5.00 / kWh
	Above 300 kWh / month		Rs. 5.50 / kWh

(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	0%
06:00 hrs – 18:00 hrs	(+) 20%

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*:

Description	Fixed Charge	Energy Charge
Individual Residential construction	Rs. 200.00 / kW / Month	Rs. 8.00 / kWh
	From 3rd year onwards: Base Tariff applicable for current year plus additional 10% of the applicable Energy Charge.	
Others	Rs. 300.00 / kW / Month	Rs. 9.00 / kWh
	From 3rd year onwards: Base Tariff applicable for current year plus additional 10% of the applicable Energy Charge.	

**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 LIST OF PERSONS WHO HAVE ATTENDED PUBLIC HEARING

List of persons who attended the virtual Public Hearing on June 24, 2022		
S. No	**Name**	**Organisation**
1	Shri Avadhesh Kumar Verma	UPRVUP
2	Smt. Rashi Singh	Council on Energy, Environment and Water
3	Shri R. C. Agarwala	NPCL
4	Shri Manoj Jain	NPCL
5	Smt. Deepti Mittal	CEO Jhansi
6	Shri Niraj Agrawal	CE (RAU) UPPCL
7	Shri Rehman	IIA
8	Shri S. K. Verma	Consumer
9	Shri Nidhi Kumar Narang	DF, UPPCL
10	Shri Parthiva Kumar Singh	DMRC
11	Shri Pankaj Kumar Gupta	DMRC
12	Shri Chanmeet Singh Syal	Council on Energy, Environment and Water
13	Shri Dinesh Barasia	Secretary, IIA
14	Smt. Pratyusha Khandelwal	Consultant
15	Shri Anil Kumar Gupta	Consumer
16	Shri Pramod Gupta	IIA
17	Shri Bharat Sharma	Council on Energy, Environment and Water
18	Shri Kumar Singh	Consumer
19	Shri Shubham	Consumer
20	Shri Sarnath Ganguly	NPCL
21	Shri Tanhauser D Pierce	NPCL
22	Shri Sanket Srivastava	NPCL
23	Shri A. K. Arora	NPCL
24	Shri Harinder Singh	NPCL
25	Shri Himani Kulshrestha	Consumer
26	Smt. Kanika Balani	Council on Energy, Environment and Water
27	Shri Shafiullah Shafiullah	Consumer

12.3 ANNEXURE I

Details of approval of Power Purchase												
S. No.	**Source**	**Type (Logn Term/ Medium Term/ Short Term/ RE - Solar/ RE - Hydro/ RE- Non-Solar)**	**Procurement Method (PPA, Deep Portal, Exchange etc.)**	**Delivering Point**	**Fixed Charges**	**Energy Charges**	**Inter-State Transmission Charges**	**Inter-State Losses**	**Intra-State Transmission Charges**	**Intra-State Losses**	**Approved by the Commission (Y/N)**	**If Approved (Petition No./ Date of Order)**
1												
2												
3												
4												
5												
6												
7												

12.4 ANNEXURE – II

CATEFORY / SUB-CATEGORY WISE CONSOLIDATED FOR NPCL AVERAGE BILLING RATE (ABR) FOR FY 2022-23

Consumer Sub-Category	**Average Billing Rate**
	Rs. / kWh
LMV-1: Domestic Light, Fan & Power	
Life Line Consumers (both Rural and Urban)	3.89
Dom: Rural Schedule (unmetered)	2.21
Dom: Rural Schedule (metered) other than BPL	4.28
Dom: Supply at Single Point for Bulk Load	6.77
Other Metered Domestic Consumers other than BPL	6.25
LMV-2:Non Domestic Light, Fan & Power	
Non Dom: Rural Schedule	5.88
Non Dom: Other Metered Non-Domestic Supply	10.22
LMV-3: Public Lamps	
Gram Panchayat ##	9.08
Nagar Palika & Nagar Panchayat ##	9.08
Nagar Nigam	9.08
LMV-4: Light, fan & Power for Institutions	
Inst: Public	7.91
Inst: Private	10.13
LMV-5: Private Tube Wells/ Pumping Sets	
PTW: Rural Schedule (unmetered)	0.71
PTW: Rural Schedule (metered)	2.03
Consumers getting supply as per "Urban Schedule (Metered Supply)"	6.97
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	6.61
Connected Load above 20 kW	6.61
LMV-7 & 8: Public Water Works, State Tube Wells & Pump Canals upto 100 HP #	
Urban Schedule (Meter)	8.59
Urban Schedule (Un-Meter)	
LMV-9: Temporary Supply	9.33
LMV-11: Electrical Vehicles	6.57

Consumer Sub-Category	**Average Billing Rate**
	Rs. / kWh
HV-1: Non-Industrial Bulk Loads	
Public Institutions	
Supply at 11 kV	7.03
Supply above 11 kV	9.63
Private Institutions	
Supply at 11 kV	7.58
Supply above 11 kV	9.28
HV-2: Large and Heavy Power above 100 BHP (75 kW) #	
HV2 Urban Schedule: Supply at 11 kV	7.55
HV2 Urban Schedule: Supply above 11 kV & upto 66 kV	7.05
HV2 Urban Schedule: Supply above 66 kV & upto 132 kV	
HV2 Urban Schedule: Supply above 132 kV	6.24
Total	**7.22**

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 these categories.