



Uttar Pradesh Electricity Regulatory Commission
Lucknow

Petition No. 1527 of 2019

And

Petition No. 1935 of 2022

Filed by

Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL)

IN THE MATTER OF:

MYT FOR 5X200 MW OBRA-B TPS (FY 2019-20 TO FY 2023-24)

Lucknow

Dated: 24.05.2023



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Petition Nos. 1527 of 2020 and 1935 of 2023

BEFORE

UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

LUCKNOW

Date of Order: 24.05.2023

Present:

Hon'ble Shri Raj Pratap Singh, Chairman
Hon'ble Shri Vinod Kumar Srivastava, Member (Law)

**IN THE MATTER OF: OBRA B (5x200 MW) TPS PETITION FOR DETERMINATION
OF MYT OF FY 2019-20 to FY 2023-24.**

M/s Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVNL)
SHAKTI BHAWAN, 14-ASHOK MARG, LUCKNOW.

.....Petitioner

Vs

1. Uttar Pradesh Power Corporation Limited (UPPCL)
SHAKTI BHAWAN, 14-ASHOK MARG, LUCKNOW
2. Madhyanchal Vidyut Vitran Nigam Ltd.
4-A, Gokhale Marg, Lucknow - 226001
3. Poorvanchal Vidyut Vitran Nigam Ltd.
Bhikharipur, 132KV Sub-Station, Poorvanchal Vidyut Bhawan, P. O. Diesel
Locomotive Works, Varanasi - 221004
4. Paschimanchal Vidyut Vitran Nigam Ltd.
Victoria Park, Meerut-250001
5. Dakshinachal Vidyut Vitran Nigam Ltd.
Urja Bhawan, 220KV Sub-Station Mathura bypass Road, Agra - 282007
6. Kanpur Electricity Supply Co. Ltd.
KESA House, 14/71, Civil Lines, Kanpur - 208001

.....Respondent(s)

The following were present:

1. Shri Rajiv Srivastava, Advocate, UPRVNL
2. Shri Shailendra Tiwari, Consultant, UPRVNL
3. C.E(Commercial), UPRVNL
4. Shri Hari Shyam, S.E(Commercial), UPRVNL
5. Shri Raj Kumar Verma, A.E(Commercial), UPRVNL
6. Shri Nitish Gupta, Counsel, UPPCL
7. Ms. Parichita Chowdhury, Advocate, UPPCL
8. Shri Deepak Raizada, C.E (PPA), UPPCL
9. Shri Haroon Aslam, S.E(PPA), UPPCL
10. Shri Avdhesh Kumar Verma, UPRVUP

Multi-Year Tariff and ARR for FY 2019-20 to FY 2023-24 for OBRA-B (UPRVNL)



11. Shri Rama Shankar Awasthi, Consumer

ORDER

(Date of Public Hearing- 16.03.2023)

1. BACKGROUND & RECORD OF PROCEEDINGS

1.1 Background

1.1.1 Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (hereinafter referred to as the 'UPRVNL' or the 'Petitioner'), is a company incorporated on 25th August 1980 with the principal object of generating electricity. UPRVNL is a wholly owned company of the Government of Uttar Pradesh. Pursuant to the Uttar Pradesh Electricity Reforms Act, 1999 and the statutory transfer scheme notified there under, the Petitioner was vested with the activities of generation and sale of electricity from thermal generation assets in the State of Uttar Pradesh. All the electricity generated by the Petitioner is sold to Uttar Pradesh Power Corporation Limited (hereinafter referred to as the 'UPPCL'), which under the aforementioned transfer scheme is vested with the transmission and distribution of electricity in the State of Uttar Pradesh.

1.1.2 UPRVNL owns, maintains, and operates the following generating stations

Table 1:

Present Installed Capacity and Derated capacity of UPRVNL Generating Stations

S No	Thermal Power Station	Unit No.	Installed Capacity	Derated Capacity	Date of Commercial Operation
1	Anpara - A	1	210 MW	210 MW	01-Jan-87
2		2	210 MW	210 MW	01-Aug-87
3		3	210 MW	210 MW	01-Apr-89
4	Anpara - B	4	500 MW	500 MW	01-Mar-94
5		5	500 MW	500 MW	01-Oct-94
6	Obra - B	9	200 MW	200 MW	15-Mar-80
7		10	200 MW	200 MW	06-Mar-79
8		11	200 MW	200 MW	14-Mar-78
9		12	200 MW	200 MW	29-May-81
10		13	200 MW	200 MW	29-Jul-82
11	Harduaganj	7	110 MW	110 MW	01-Aug-78
12	Harduaganj Extn.	8	250 MW	250 MW	01-Feb-12
13		9	250 MW	250 MW	10-Oct-13
14	Parichha	2	110 MW	110 MW	25-Feb-85
15	Parichha Extn	3	210 MW	210 MW	24-Nov-06
16		4	210 MW	210 MW	01-Dec-07
17	Parichha Extn.II	5	250 MW	250 MW	17-Jul-12
18		6	250 MW	250 MW	18-Apr-13
19	Anpara D	6	500 MW	500 MW	08-May-2016

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Multi-Year Tariff and ARR for FY 2019-20 to FY 2023-24 for OBRA-B (UPRVNL)



20		7	500 MW	500 MW	18-Oct-2016
21	Harduaganj Extension-II	10	660 MW	660 MW	09-Feb-2022

In addition to the above the following plants or Units are scheduled to be added to the generation capacity of UPRVUNL in the upcoming control period:

Sl. No.	Project	Location	Capacity Addition
1	Obra 'C' Extension	Obra, Sonbhadra	2x660 MW
2	Panki Extension	Panki, Kanpur	1x660 MW
Total			1980 MW

1.1.3 The Petitioner vide Petition No. 1527/2019 has filed one consolidated Petition on 06th October 2019 for the Multi-Year Tariff and annual revenue requirement for the Period of FY 2019-20 to FY 2023-24 for all Thermal Power Generating Stations based on the normative parameters and MYT Generation Regulations 2019. Subsequently, the Petitioner made six additional submissions on 03rd January 2020, 14th October 2020, 02nd September 2021, 02nd June 2022, 2nd Dec 22 and 28th Dec'22.

1.1.4 The chronology and date of filing main petition and subsequent additional submissions is detailed in the table below:

Table 2

Submission	Date of submission	Details of submission
Main Multi Year Tariff petition	06-11-2019	MYT Petition filed for Determination of ARR and Tariff for Anpara 'A' TPS, Anpara 'B' TPS, Anpara 'D' TPS, Obra 'B' TPS, Harduaganj #7 TPS, Harduaganj Extension TPS, Parichha #2 TPS, Parichha Extension TPS, Parichha Extension II TPS for existing UPRVUNL TPS and Provisional Tariff for Harduaganj Extension Stage-II TPS.
Additional Submission-1	03-01-2020	Additional Submission-1 was made before the Commission with addition of Projected additional capitalisation as below: <ul style="list-style-type: none"> Anpara-A: Rs. 448.06 Crore for installation of FGD and ESP in FY 2022-23 Anpara B: Rs. 662.34 Crore for installation of FGD and ESP in FY 2022-23 Anpara D: Rs. 556.08 Crore for installation of FGD and Nox in FY 2021-22

Multi-Year Tariff and ARR for FY 2019-20 to FY 2023-24 for OBRA-B (UPRVNL)



Submission	Date of submission	Details of submission
		<ul style="list-style-type: none"> • Harduaganj Extension: Rs. 59.83 Crore for installation of FGD and Nox in FY 2019-20 • Parichha Extension: Rs. 105.86 Crore for installation of FGD and Nox in FY 2022-23
Additional Submission-2	14-10-2020	<p>Additional Submission-2 was made before the Commission with addition of Projected additional capitalisation as below:</p> <ul style="list-style-type: none"> • Anpara A: Rs. 50.32 Crore for Ash Dyke Height Raising work in FY2019-20 (Rs. 12.04 Cr) and FY 2020-21 (Rs. 38.28 Cr) • Anpara A: Rs.283.50 Crore for Special Allowance in FY 2019-20 to FY 2023-24 (630x9.00 Lak/MW). • Obra B: Rs. 1,546.71 Crore for Renovation and Modernisation (R&M) work balance work out of Rs. 2849.89 Cr as approved by ETF. • Parichha Extension S-II: Rs. 11.79 Crore for Purchase of Mandatory Spares as per UPERC order dated 26.10.2017. • Harduaganj Unit No. 7 revised MYT Petition due to change in GFA values in True-up Petition.
Additional Submission-3	02-09-2021	<p>Additional Submission-3 was made before the Commission as below:</p> <p>Anpara D: At the time of filing of the petition, the projected capital expenditure up to FY 2023-24 based on projections were available with the Petitioner on the basis of which, the tariff determination petition was filed before the Hon'ble Commission. Further, since the Financial Year 2020-21 has completed, and the Petitioner has finalized the total capital expenditure for Financial Year 2019-20 based on Audited Accounts and Financial Year 2020-21 based on provisional accounts of Anpara D TPS.</p> <p>Harduaganj Extension Stage-II: Harduaganj Extension Stage-II provisional tariff application submitted before the Hon'ble Commission was based on expenditure incurred till 30th September 2020. Since now the Financial Year 2020-21 has completed, and Petitioner hereby submit</p>

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Multi-Year Tariff and ARR for FY 2019-20 to FY 2023-24 for OBRA-B (UPRVNL)



Submission	Date of submission	Details of submission
		provisional tariff application based on Statutory Auditor certificate as on 31st March 2021 and Tariff projections for the period FY 2021-22 to FY 2023-24.
Additional Submission-4	02-06-2022	Harduaganj Extension Stage-II provisional tariff application submitted before the Hon'ble Commission was based on expenditure incurred 31st March 2021. Since now the Harduaganj Extension Stage -II (660 MW) has achieved the COD on 9th February 2022, petitioner submits the expenditure up to COD based on the Statutory Auditor certificate as on 8th February 2022 (as required under clause 15.3 of UPERC Generation Regulations, 2019) and Tariff projections for the period FY 2022-23 to FY 2023-24.
Re-submission of MYT Petition	02-12-2022	As per direction of Hon'ble Commission on date 03.11.2022 during hearing on Petition No. 1527/2019 for ARR & Multi Year Tariff of various Thermal Power Stations of UPRVUNL for FY 2019-20 to FY 2023-24 including Provisional Tariff of Harduaganj Extension Stage -II (1x660 MW) to re-submit the ARR & MYT Petitions Station wise considering the closing number based on True-up Order dated 05-09-2022 and 03-10-2022 with separate covering letter, accordingly UPRVUNL has submitted MYT Petition for the period FY 2019-20 to FY 2023-24 based on below: <ul style="list-style-type: none"> • FY 2019-20 and FY 2020-21 based on the Audited Accounts • FY 2021-22 based on the provisional accounts. • FY 2022-23 and FY 2023-24 based on the Projections
Additional Submission 1	28-12-2022	The Hon'ble Commission is requested to permit recovery of Statutory charges like water cess, water cost, payment to Pollution Control Board, rates and taxes, Regulatory fees, Tax on income including Fringe Benefit Tax, Forest cess, Pay Commission revision impact, other fuel related costs, station supplies, lubricants and consumables critical to the generating stations, Gratuity and Provident fund, fees payable to UPERC/CERC/CEA/UPSLDC etc.

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**Multi-Year Tariff and ARR for FY 2019-20 to FY 2023-24 for
OBRA-B (UPRVNL)**



1.1.5 Prayers

- a) To accept the Re-submission of the Multi-Year Tariff of OBRA-B 5X200 MW TPS for the Control Period comprising FY 2019-20 to FY 2023-24.
- b) To approve Annual Revenue Requirement for OBRA-B for each of the financial years for the period of FY 2019-20 to FY 2023-24.
- c) Permit recovery of expenses understated /not considered in the Petition subsequent to the submission of this Petition.
- d) To condone any inadvertent commissions/errors/shortcomings and permit the applicant to add/change/modify/alter this Petition and make further submissions as may be required at later stages.
- e) To pass such orders as Hon'ble Commission may be deemed fit and proper and necessary in the facts and circumstances of the case, to grant relief to the Petitioner.

1.1.6 The Commission, during hearing dated 03.11.2022, directed UPRVUNL to file separate Petition for each of the power station including additional submission, if any, within a month i.e., by 3rd December 2022 with a copy to UPPCL. UPPCL was to file its reply by 28th January 2022. On 02.12.2022, UPRVUNL filed separate Petition(s) No. 1928/2022 to 1937/2022 in compliance to the Commission's order dated 21.11.2022. UPPCL has filed its reply against four power plants i.e., Anpara-A, Anpara-B, Anpara-D & Obra-B.

1.1.7 During the proceedings on 25.01.2023, UPPCL sought 10 days of time for filing remaining replies. Shri Rajeev Shrivastava, Advocate of UPRVUNL sought four-week time to file its rejoinder to the UPPCL's reply. After hearing the parties, the Commission allowed UPPCL to file their reply in ten days' time with a copy to UPRVUNL and UPRVUNL to file its rejoinder within three-week time thereafter. The Commission admitted the Petition for further processing with direction that the Petitioner shall furnish further information/clarifications, if any, as deemed necessary by the Commission during the processing of the Petition and provide the same to the satisfaction of the Commission within the time frame as stipulated by the Commission.

1.1.8 The details of the Public Hearing on 16.03.2023 were provided on the Commission's website www.uperc.org and all stakeholders who wished to participate in the Public Hearing were to send an e-mail on office@uperc.org latest by March 13, 2023, providing their name, organisation, designation, mobile number, email address to register themselves. All the stakeholders who wished to participate in the Public Hearing were to submit their written suggestions and objections in hard copies (one original + 5 sets of copies) to the Secretary, UPERC and be present during the public hearing.

1.1.9 The Commission held the public hearing on 16.03.2023, wherein, following comments from public representatives and UPPCL were received:



Sh. Rama Shankar Awasthi

- (a) UPRVUNL has not uploaded the annexures to the Petition in their website for public reference and comments. R&M cost of Obra power station claimed keeps on increasing and therefore prudent check is necessary.
- (b) The Commission is requested to analyse cost towards emission in view of CEA norms, however, In Principal approval should not be entertained for the same.
- (c) For the new Harduaganj power station of 660MW, PPA is not available in their website for the public comments and therefore, its analysis of time & cost overrun is difficult to be analysed for unknow SCOD.

Sh. Avdhesh Kumar Verma

- (d) It is very well known that cost efficient energy is supplied to the consumers from the UPRVUNL power station and to continue the same, it is necessary to coordinate and support in a coherent manner so that the benefit of cheap power is available to the state consumers.
- (e) He requested the Commission to allow claimed cost only after prudent check so that the consumers are not burdened with increase in tariff.
- (f) The assets of UPRVUNL for the upcoming project of Obra-D and Anpara-E should remain with UPRVUNL for cost efficient power being made available to the state consumers.

UPPCL

- (g) Out of ten power projects, five has already completed its useful life and therefore, in principle approval for the additional capital expenditure for only essential items be allowed.
- (h) The Commission enquired UPPCL about the status of the PPA with projects whose useful life is completed. Sh. Gupta responded that they would file the details in their written submissions.
- (i) As per Regulation 20 of Generation Tariff Regulations 2019, UPRVUNL cannot be allowed cost towards R&M as well as Special Allowance. Further, for the Claimed R&M cost, UPRVUNL has not provided the details such as Detailed Project Report, Cost Benefit Analysis, etc.
- (j) UPRVUNL in its additional submission has claimed reimbursement of statutory due without providing the details along with requisite documents for the same and therefore, the same should not be allowed by the Commission.



UPRVNL

- (k) The interest of UPRVNL should be protected in terms of applicable Rules and Regulations of the Commission. They would file the details as stated and required by the stakeholders in the matter.

After hearing the stakeholders, the Commission granted two-week time to the stakeholders to file their written submissions. Sh. Awasthi submitted its written comments on 16.03.2023. UPPCL has filed its written submissions on 26.04.23.

1.2 Regulatory Framework

- 1.2.1 Section 61 of the Electricity Act, 2003 deals with Tariff Regulations Section 62(1) of the Act provides that the Appropriate Commission shall determine the tariff by the provisions of the Act, inter alia for the supply of electricity by a generating company to a distribution licensee. Further, by Section 86 (1) (a) of the Act, the Commission shall determine the tariff for the generation of power at stations owned by the UPRVNL. Section 86(1) (b) further mandates the Commission to regulate the electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees.
- 1.2.2 Accordingly, the Commission issued the First tariff regulations the Uttar Pradesh Electricity Regulatory Commission (Terms and Condition of Generation Tariff) Regulations, 2004 which were applicable for FY 2005-06 to FY 2007-08. Such regulations were extended for FY 2008-09 as well. The Commission had approved tariff orders for the period FY 2005-06 to FY 2007-08 dated 26th March 2007 and for FY 2008-09 dated 6th March 2009 based on the framework of the aforementioned regulations.
- 1.2.3 The Commission notified the Uttar Pradesh Electricity Regulatory Commission (Terms and Condition of Generation Tariff) Regulations, 2009 for the control period of FY 2009-10 to FY 2013-14 wherein the vintage of certain power stations (TPS), Obra B TPS, Panki TPS, Harduaganj TPS, and Parichha TPS, were recognized and certain relaxations towards operating norms for these stations were provided.
- 1.2.4 Subsequently, the Commission notified the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions of Generation Tariff) Regulations 2014 which came into effect from 01.04.2014 and were for the control period of FY 2014-15 to FY 2018-19. In continuation with the previous MYT Regulations, 2009 the vintage of certain power stations of the Petitioner namely Obra A Thermal Power Station (TPS), Obra B TPS, Panki TPS, Harduaganj TPS, and Parichha TPS were continued and relaxed operating norms in respect of such stations were accordingly provided.





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1.2.5 Furthermore, on 11th September 2019 UPERC vide notification no. UPERC/Secy/Generation Regulations, 2019/343A has notified Generation Regulation for the control period of FY 2019-20 to FY 2023-24. In continuation with the previous MYT Regulations, 2014, the vintage of certain Petitioner power stations, namely Obra-B TPS, Harduaganj-B TPS, and Parichha TPS, was continued and relaxed operating norms in respect of such stations were accordingly provided.

1.3 UPRVUNL MYT Petition for the Control Period (FY 2019-20 To FY 2023-4)

Petition No. 1935/2022

1.3.1 The Petitioner as per the direction of the Commission resubmitted the MYT and ARR petition for FY 2019-20 to FY 2023-24 for OBRA-B (5X200 MW) in Petition No. 1935/2022 based on and along with Audited Account of UPRVUNL for the period of FY 2019-20 and FY 2020-21 and provisional accounts for FY 2021-22. The tariff for FY 2022-23 and FY 2023-24 is based on projections. The Summary of the Petition is tabulated below:

Table 3 Calculation of Annual Fixed Charges projected by the Petitioner in Rs. Cr.

Particulars	2019-20 (Audited)	2020-21 (Audited)	2021-22 (Provisional)	2022-23 (Projected)	2023-24 (Projected)
Depreciation	106.11	114.12	114.32	145.17	185.19
Interest on Loan Capital	64.70	63.17	50.18	78.06	114.63
Return on Equity	83.41	89.64	89.79	113.56	144.41
O&M Expenses	329.60	341.20	353.10	365.60	378.40
Interest on Working Capital	39.48	44.38	41.86	55.33	57.29
Total Capacity Charges	623.30	652.51	649.25	757.71	879.93
Energy ex bus-MUs	5933	5933	5933	5933	5933
FC in Rs. per unit	1.05	1.10	1.09	1.28	1.48

Table 4 Calculation of Energy charges projected by the Petitioner

Description	Unit	2019-20	2020-21	2021-22	2022-23	2023-24
Capacity	MW	1000	1000	1000	1000	1000
PLF	%	75%	75%	75%	75%	75%
Gross Station Heat Rate	Kcal/kWh	2755	2755	2755	2755	2755
Auxiliary Energy Consumption	%	9.70%	9.70%	9.70%	9.70%	9.70%

Multi-Year Tariff and ARR for FY 2019-20 to FY 2023-24 for OBRA-B (UPRVNL)



Description	Unit	2019-20	2020-21	2021-22	2022-23	2023-24
Energy Generation - Gross	MU	6,570	6,570	6,570	6,570	6,570
Auxiliary Energy Consumption	MU	637	637	637	637	637
Ex-bus Energy Sent Out	MU	5,933	5,933	5,933	5,933	5,933
Specific Oil Consumption	ml/kWh	2.10	2.10	2.10	2.10	2.10
Wt. Avg. GCV of Oil	KCal/Lt	10,081	9,026	9,141	9,186	9,186
Price of Oil	Rs./KL	57,652	50,551	65,240	1,08,408	1,08,408
Wt. Avg. GCV of Coal	kCal/kg	3787	3967	3777	3425	3425
GCV of Primary Fuel (Coal) less 85 Kcal/Kg on account of variation during storage	kCal/kg	3702	3882	3692	3340	3340
Price of Coal	Rs./MT	2476	2779	2717	2591	2591
Heat Contribution from SFO	Kcal/kWh	21.17	18.96	19.20	19.29	19.29
Oil Consumption	KL	13797	13797	13797	13797	13797
Heat Contribution from Coal	Kcal/kWh	2734	2736	2736	2736	2736
Specific Coal Consumption	kg/kWh	0.74	0.70	0.74	0.82	0.82
Coal Consumption	MMT	4.85	4.63	4.87	5.38	5.38
Total Cost of Oil	Rs Cr	79.54	69.75	90.01	149.57	149.57
Total Cost of Coal	Rs Cr	1,201.26	1,287.10	1,322.75	1,394.65	1,394.65
Total Fuel Cost	Rs Cr	1,280.80	1,356.85	1,412.76	1,544.22	1,544.22
Rate of Energy Charge from Secondary Fuel Oil ex-bus	Paise/kWh	13.41	11.76	15.17	25.21	25.21
Rate of Energy Charge from Coal ex-bus	Paise/kWh	202.48	216.95	222.96	235.08	235.08
Rate of Energy Charge ex-bus per kWh	Paise/kWh	215.89	228.71	238.13	260.29	260.29

Additional Submission dated 8.12.2022.

1.3.2 The petitioner has filled additional submission to allow the recovery of the statutory charges imposed by the State and Central government such as electricity duty, Water cost, Water cess, pollution cess, Rates and taxes including fringe benefit, tax, Forest Cess, Gratuity, provident fund, the impact of pay revision and fees payable to UPERC/CERC/CEA/UPSLDC, etc. as separate pass-through in tariff.

1.3.3 The Petitioner in its revised Petition no. 1935/2022 has submitted that there shall be additional capitalization to the tune of Rs. 1894.94 Crore spreads across the Control period of FY 2019-20 to FY 2023-24 including projected Additional Capitalization for FY 2022-23 and FY 2023-24 as follows:



Table 5 Projected Additional Capitalization claimed by the Petitioner in Rs. Cr. for FY 2022-23 to FY 2023-24

Particulars	2022-23 (Projections)	2023-24 (Projections)
FGD	10.00	50.00
Fire Fighting System	20.00	15.00
R&M Balance Work	1012.19	253.05
HQ Allocation	9.06	1.93
Total	1051.25	319.98

1.4 UPPCL Counter Affidavit dated 23.01.2023 and UPRVUNL reply dated 06.03.2023

a) Governing Tariff Regulation

UPPCL Objection

Petitioner has not provided incomplete/ not filled Tariff Forms, (Form 5, Form 9A & Form 10) which as per the mandate of the UPERC Tariff Regulations 2019 are necessarily required to be provided.

Petitioner Reply

It has submitted the relevant Forms in accordance with the relevant provisions of the UPERC Tariff Regulations as applicable.

b) Additional capitalization

UPPCL Objection

UPPCL submitted that Regulation 20 (2) of UPERC Tariff Regulation 2019 does not provide for in-principal approval for additional capital expenditure after the cut-off date and additional capital expenditure is only allowed after the same is actually incurred. The Petitioner has claimed additional capital expenditure during FY 2019-24 on account of the Boiler Plant & Machinery, Turbine Generator, Steam PWR Generator, Coal Handling plant, Trans Plant Transformers Rating 100 kV, Tools and Tackles, Furniture & fixture, Computer, Photostat machine, Auxiliary in steam PWR plant, other civil works, FGD, ESP.

The Petitioner has claimed expenditures of INR 0.32 Crores, INR 1.09 Crores, and INR 4.57 Crore for FY 2019-20, FY 2020-21, and FY 2021-22 respectively, incurred for Furniture & Fixture, Photostat, which may be disallowed, based on the findings of the Commission in the True Up Order. The Petitioner has not provided relevant supporting documents such as a Detailed Project Report, Cost Benefit Analysis, and Feasibility Report scope of work pertaining to claims made towards additional capitalization for FY 2019-24. UPRVUNL has only provided approval from GoUP for claiming add-cap during FY -24.

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The claims of INR 1894.94 crores of the Petitioner w.r.t. additional capitalisation may be partially approved for INR 1793.94 Crores strictly as per terms and conditions of the UPERC Tariff Regulations, 2019.

Petitioner Reply

The Capital Expenditure claimed by them in the present Petition is based on 1) Opening capital cost as on 01.04.2019 & 2) estimated capital expenditure for 2019-24 projected in terms of Regulations 17 & 20 of the tariff regulation 2019. Furthermore, additional capital expenditure is incurred under Regulation 20 (2) (ii), (iii), and (vi) of the tariff regulation 2019. The amount incurred as additional capital expenditure is towards the Ash Dyke Height Raising, ETP, Fire Fighting System, and Installation of FGD and ESP which has necessary for the efficient and successful operation of the power plant. It has already submitted the Board approval, ETF approval, and other supporting documents in its MYT Petition.

c) Means of Finance

UPPCL Objection

A reduction in the additional capitalisation based on the above submission of INR 100.99 Crores would have a significant impact on the debt and equity ratio of INR 70.69 Crores and INR 30.30 Crores respectively and accordingly Depreciation of INR 117.80 Crore ought to be disallowed for the Period of FY 2019-24.

Petitioner Reply

The Commission in its order dated 05.09.2022 and 03.10.2022 had prescribed a normative approach of financing the capital expenditure in the ratio of 70% debt and 30% equity in line with the Tariff Regulations and the allowable depreciation had been considered as normative loan repayment. Accordingly, in order to maintain consistency in approach the Petitioner has considered the aforementioned philosophy and calculated the normative debt & normative equity. The opening values of accumulated depreciation, normative loan, and normative equity as on 01.04.2019 have been adopted from the true-up order for FY 2014-15 to FY 2018-19.

d) Depreciation

UPPCL Objection

The Petitioner cannot be permitted to claim any depreciation over and above the maximum allowable depreciation as per the UPERC Generation Tariff Regulation, 2019. The Depreciation allowable for the period FY 2019-24 shall be INR. 663.71 Crore instead of INR 664.91 Crore as claimed by the Petitioner.

Petitioner Reply

It has claimed depreciation in accordance with Regulation 24 (iii) of the UPERC (Terms and Condition of Generation Tariff) Regulation, 2019. It would only be fit

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to consider station-wise depreciation calculated at the prescribed in Appendix-3 for different asset classes and not at the average rate.

e) Return on Equity

UPPCL Objection

The Petitioner has projected ROE for the Period of 2019-24 by considering the rate of interest as 15% per annum on a normative basis. However, based on the GoUP order dated 31.07.2017 and subsequent adoption of the same by the Board of Directors on 09.04.2018, the Petitioner has billed the ROE at 2% for FY 2019-24. Therefore, the Commission may allow ROE as INR 144.81 Crores against INR 1093.15 Crores as claimed by the Petitioner for FY 2019-24.

Petitioner Submission

The Petitioner submitted that the Uttar Pradesh Government, subsequent to the issuance of the Tariff order for FY 2014-15 to FY 2018-19 issued an order vide letter no. 1714/24-1-2017-1714(B)/2017 dated 31.07.2017 to the Petitioner approving the Petition to maintain the provision of Return on Equity at 2% from FY 2017-18 onwards so as to support UPPCL until such time UPPCL achieves turnaround in accordance with the UDAY Scheme. Considering the poor health of UPPCL's balance sheet and providing some breathing space the provision of a 2% Return on equity for the Petitioner was implemented. Accordingly, the Petitioner has billed the Fixed cost keeping the RoE at 2% from FY 2017-18 onwards to UPPCL and the rest of 13.5% has been foregone.

f) Interest on Loan

UPPCL Objection

The Petitioner's claim of IOL for Rs. 371.85 Cr may be allowed against Rs. 363.28 Cr as claimed.

Petitioner Submission

The Petitioner submitted that weighted average rate of interest of overall long-term portfolio for FY 2018-19 has been considered for FY 19-24.

g) Interest on Working Capital

UPPCL Objection

UPPCL submitted that with respect to the reduction in the additional capitalisation the AFC for the Period FY 2019-24 has changed. This impacts the receivable equivalent to 45 days of capacity charges and energy charges and the allowable IoWC shall be INR 232.08 Crore instead of INR 238.34 Crore.

Petitioner Submission

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The Petitioner submitted that it has worked out Interest on working capital based on the normative basis as per the provision of the Tariff Regulation 2019.

h) Annual Fixed (Capacity) Charges (AFC)

UPPCL Submission

UPPCL submitted that based on the submission made hereinabove the Annual Fixed Charge ought to be changed and accordingly, UPPCL assessed the AFC of INR 3095.85 Crore instead of INR 3564.45 Crores as claimed by the Petitioner for FY 2019-24.

i) Additional Submissions dated 28.12.2022.

UPPCL Submission

UPPCL submitted that the Commission may allow for annual payments related to various statutory charges, subject to the necessary supporting documents being provided by the Petitioner which are required to substantiate its claims, at the time truing up, subject to prudence check.

1.5 Scrutiny of the Petition

1.5.1 The Commission vide its letter no UPERC /Secy/D(G)/23-1602, dated 15.02.2023 directed the Petitioner to submit the component-wise capitalization and decapitalization details as per form 9 of Annexure 2 of the Generation Tariff Regulation 2019. The Petitioner vide letter no. 103/UNL/CE(Comm.)/MYT (2019-24) submitted the reply to the above queries along with component-wise breakup of additional capitalization for FY 2019-20 to FY 2021-22. The detailed breakup is provided in the below table:

Table 6 Additional Capitalization claimed by the Petitioner in Rs. Cr. for FY 2019-20 to FY 2021-22

Head of Work/Equipment	Add. Cap.		Regulation
	Accrual Basis	Cash Basis	
FY 2019-20			Regulations 20(4) Balance R&M Work
Bldgs.	4.35		
Boiler Plant & machinery	341.58		
Turbine Gen Steam Power Generator	63.14		
Other Misc. Eqpt.	107.48		
Other vehicles	0.31		
other	0.02		
HQ Expenses	0.01		
Total	516.89		
FY 2020-21			
Land Owned under full title	0.31		
Trans. Plt. rating 100 KVA	0.23		
Comp. Eqpt Teleph.	0.11		
Tools & tackles	0.30		
Other misc. eqpt.	0.09		
Furniture & fixtures	0.19		
Photostat machines	0.01		
Computer	0.06		

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Multi-Year Tariff and ARR for FY 2019-20 to FY 2023-24 for OBRA-B (UPRVNL)



Other	0.54		
HQ Expenses	0.03		
Total	1.86		
FY 2021-22			
Furniture & fixtures	0.00		
Office Equipment	0.01		
Photostat machines	0.10		
Computer	1.88		
Other	2.59		
HQ Expenses	0.36		
Total	4.95		

1.5.2 The Commission, subsequently, sought details of fuel data for Jan to March data of period previous to the control period 2019-24. UPRVUNL vide their letter dated 18-03-2023 have furnished cost accountant certified data for Jan -March 20 and CA certified cost data of Jan-March 19 for Parichha Unit-2 as the machine had run up to Dec'19 only.

1.6 Tariff Design

1.6.1 The tariff is structured on the following basis:

- a) The data of GFA, NFA, Debt, and Equity, as approved by the Commission of FY 2018-19 in the true-up order dated 03.10.2022 in Petition No. 1731/2021, has been considered as baseline data for the calculation of tariff and ARR for this Petition for the MYT period from FY 2019-20 to FY 2023-2024. The Accumulated Depreciation has been considered on the normative basis as derived from the approved values of GFA, NFA, Debt, and Equity in the order dated 03.10.2022.
- b) The Return on Equity has been considered as 15% as provided in the UPERC Generation Tariff Regulation 2019.
- c) The Rate of Interest has been the weighted average rate of interest calculated based on actual loans at the beginning of each financial year and is to be adjusted based on the actual loan each financial year accordingly. If there is no actual loan for a particular financial year but the normative loan is still outstanding, the last available weighted average of interest has been considered.
- d) Depreciation has been allowed as provided in Regulation 24 (iii) in the UPERC Generation Tariff Regulations, 2019.
- e) The O&M expenditure has been allowed as per the normative values provided in Regulation 24(iv) of the UPERC Generation Tariff Regulations, 2019.
- f) Working capital requirement has been allowed as per Regulation 24 (v) of the UPERC Generation Tariff Regulations 2019. The rate of interest on working capital has been allowed on a normative base is and consider as the Bank Rate

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**Multi-Year Tariff and ARR for FY 2019-20 to FY 2023-24 for
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as of 1.4.2019 or as of 1st April of the year during the tariff period FY 2019-24 in which the generating station or a unit thereof is declared under commercial operation, whichever is later.

- g) Thus, the MYT for Thermal Power Stations of the Petitioner for FY 2019-2020 to FY 2023-2024 has been worked out adopting the above elaborate methodology. -

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1.7 MYT for FY 2019-20 to FY 2023-24: Capacity (Fixed) Charges

1.7.1 Provisions under Regulations 2019

For the determination of components of fixed charges, for MYT period of FY 2019-20 to FY 2023-24, the Commission has considered the parameters as provided under UPERC Generation Tariff Regulation 2019. The Commission has thus considered to allow the parameters as below:

Table 7 Components of Fixed Charges

Particulars	Value	Remarks
Debt: Equity Ratio	70:30	As per Regulation
Return on Equity	15.00%	As Per Regulation
Interest on Loan	11.62%	last approved weighted average of the loan
O&M Expenses	Normative	As per Regulation
Interest on Working Capital	12.05%	As per regulation

1.7.2 Additional Capitalization

The unit wise COD is as under:

Table 8: COD of OBRA B 5x200 MW-TPS

Units	Actual COD
Anpara A TPS	
Unit 9	15.03.1980
Unit 10	06.03.1979
Unit 11	14.03.1978
Unit 12	29.05.1981
Unit 13	29.07.1982*

*re-commissioning to be intimated by UPRVUNL as directed in the Commission's order dated 27.10.2020 in Petition No. 1439/2019

1.7.2.1 Petition No. 1577 of 2020 was filed before this Commission by UPPCL seeking further extension of the validity of the PPA for the Vintage Plants. For Anpara A, Anpara B, Obra B and Harduaganj Unit 7 the extension was sought up to 31.03.2024. For Parichcha A, the extension was sought up to 31.03.2020. The said extension was approved by this Commission vide its Order dated 08.03.2021. Relevant excerpts from the Order dated 08.03.2021 is set out below:

"2. The Present Petition is filed by UPPCL for approval of SPPA dated 27.01.2020 for following amendments:

(a) Clause 2.0 (Term of Agreement):

"The term of agreement of for Anpara 'A', Anpara-B, Obra-B, Harduaganj (Unit No. 7) shall be for a period of five (5) years starting from 1st April 2019 and ending on 31st March 2024, and

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for Parichha-A shall be for a period of one (1) year starting from 1st April 2019 and ending on 31st March 2020 & further extendable/renewable by mutual consent between UPPCL and UPRVNL. In case UPPCL continue to get power from the for Anpara 'A', Anpara-B, Obra-B, Harduagarj (Unit No. 7) & Parichha-A TPSs even after expiry of this agreement without further renewal or formal extension thereof, then all the provisions of this agreement shall continue to operate till this Agreement is formally renewed, extended or replaced except the Tariff, which will be applicable as per order of the UPERC and as per provision of clause 6.3 of the agreement dated 26.05.2011. This agreement shall be terminable even from any earlier date from which the PPA with different DICOMS has been made effective."

.....

4. UPPCL vide letter dated 01.03.2021 has placed the amended SPPAs as per the Commission's direction vide order dated 08.12.2020 and are found to be in order. Accordingly, the SPPAs dated 22.02.2021 are approved."

1.7.2.2 UPRVNL has claimed significant amount including that on projection basis towards additional capitalization for installation of FGD and ESP and revival of Unit-3, however, has not provided any supporting documents. All five units of the TPS have already achieved their useful life and are running beyond their useful life. Further, most of the expenditure claimed by the Petitioner is for the future, for which there is no basis in the Tariff Regulations for determination of Generation Tariff. The Commission needs to verify and check the prudence of the costs claimed by the Petitioner against the standards of cost prescribed by the CEA for the installation of FGD.

1.7.2.3 Further, the Commission vide its Order dated 07.11.2006 in Petition No. 353 of 2006 has approved R&M at a cost of Rs. 1687.78 Cr or the actual, whichever is less in consideration of refurbishment of 5x200 MW OBRA project capacity to 5x216 MW capacity. The Commission has already approved Rs. 860.88 Cr and Rs. 72.79 Cr on account of R&M during 2016-17 and 2018-19 respectively in True-Up Petition No. 1731/2021 vide its Order dated 03.10.2022. **Therefore, the Commission provisionally approves Rs. 516.89 Cr during 2019-20 and Rs. 1.86 Cr during 2020-21 based on audited accounts subject to disallowance for furniture & fixtures, vehicles, computer and photostat etc. in this MYT.**

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1.7.2.4 Further, the Commission, due to delayed commissioning of Unit-13, vide its order dated 27.10.2020 in Petition No. 1439/2019 has directed the Petitioner to file a fresh Petition for claiming expenditure on account of re-commissioning of Unit-13 along with documents as per the Commission's Order dated 18.06.2020.

Therefore, the Petitioner is directed to provide relevant supporting documents, such as DPR, cost benefit analysis, Feasibility report and scope of etc., during the True-up for FY 2019-24 for consideration before the Commission. At this stage, the Commission does not consider it prudent to allow additional capital expenditure on provisional accounts / projected basis for recovery as the plant has lived its useful life and PPA is valid only to 31.03.2024. The Petitioner is also directed to place on record the status of refurbishment of capacity of 200 MW Units to 216 MW at the time of True-up.

1.7.3 GFA Balance

1.7.3.1 The Commission approves the following GFA basis the True-up Order dated 03.10.2022 for FY 2019-24:

(Figures in Rs. Crore)

Particulars	Approved	Approved	Approved	Approved	Approved
Opening GFA	1783.88	2058.63	2060.24	2060.24	2060.24
Capitalization	516.58	1.61	0.00	0.00	0.00
Deletions	241.83	0.00	0.00	0.00	0.00
Closing GFA	2058.63	2060.24	2060.24	2060.24	2060.24
Average GFA	1921.26	2059.44	2060.24	2060.24	2060.24

1.7.4 Depreciation

1.7.4.1 The Commission for the purpose of calculation of depreciation guided by clause 24 (iii) UPERC Generation Regulation, 2019. The Commission has applied depreciation rates as prescribed in Appendix iii of the regulation based on the gross fixed assets and capitalization approved and worked out the depreciation accordingly.

Depreciation approved by the Commission for FY 2019-24 Period

(Figures in Rs. Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2024-25
	Approved	Approved	Approved	Approved	Approved
Capital Cost including additional capitalization	1921.255	1921.26	2060.24	2060.24	2060.24
Depreciable value =90% of Capital cost (excluding Land cost)	1725.25	1725.25	1725.25	1725.25	1850.05
Cumulative depreciation approved up to respective financial year	755.88	862.00	976.09	1090.23	1204.37
Depreciation approved in the instant Petition	106.12	114.10	114.14	114.14	114.14
Cumulative depreciation approved up to respective financial year	862.00	976.09	1090.23	1204.37	1318.50

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1.7.5 Means of Finance

1.7.5.1 Accordingly, the Commission has approved the normative equity, debt, and depreciation for the Period of FY 2019-20 to FY 2023-24. The GFA, Debt, equity and Net fixed asset as approved are as below:

(Figures in Rs. Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Opening GFA	1783.88	2058.63	2060.25	2060.26	2060.26
Additions	516.58	1.61	0.01	0	0
Deletions	241.83	0	0	0	0
Closing GFA	2058.63	2060.25	2060.26	2060.26	2060.26
Closing Net GFA	1196.63	1084.16	970.03	855.89	741.76
Financing					
Opening Equity	514.81	597.24	597.72	597.72	597.72
Additions	154.97	0.48	0.00	0.00	0.00
Deletion	72.55	0.00	0.00	0.00	0.00
Closing Equity	597.24	597.72	597.72	597.72	597.72
Open. Accumulated Depreciation	755.88	862.00	976.09	1090.23	1204.37
Depreciation during the Year	106.12	114.10	114.14	114.14	114.14
Closing Accumulated Depreciation	862.00	976.09	1090.23	1204.37	1318.50
Opening Debts	513.62	599.83	599.83	599.83	599.83
Additions	361.61	1.13	0.01	0.00	0.00
Less: Depreciation (Normative Repayment)	106.12	1.13	0.01	0.00	0.00
Decapitalisation	169.28	0.00	0.00	0.00	0.00
Closing Debts	599.83	599.83	599.83	599.83	599.83

1.7.6 Interest on loan

1.7.6.1 The Commission has considered the outstanding loan as of 1st April 2019 as the opening loan for FY 2019-20 and the repayment for the control period shall be equal to the depreciation allowed for the year. The Commission has considered the last available weighted average rate of interest for the calculation of the Interest on Loan for the control period of FY 2019-24.

(Figures in Rs. Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	Approved	Approved	Approved	Approved	Approved
Opening Loan	513.62	599.83	486.86	372.72	258.59
Addition	361.61	1.13	0.00	0.00	0.00

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Normative Repayment	106.12	114.10	114.14	114.14	114.14
Decapitalisation	169.28	0	0	0	0
Closing Loan	599.83	486.86	372.72	258.59	144.45
Average Debt	556.72	543.34	429.79	315.65	201.52
Interest Rate	11.62%	11.62%	11.62%	11.62%	11.62%
Interest on Loan	64.69	63.14	49.94	36.68	23.42

1.7.7 Return on Equity

1.7.7.1 The Commission has approved ROE @ 15.00% in terms of UPERC Generation Regulation, 2019. Accordingly, the Return on Equity to the Petitioner has been projected below:

(Figures in Rs. Crore)

Particular	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	Approved	Approved	Approved	Approved	Approved
Opening Equity	514.81	597.24	597.72	597.72	597.72
Additions	154.97	0.48	0	0	0
Less: Decapitalisation	72.55	0	0	0	0
Closing Equity	597.24	597.72	597.72	597.72	597.72
Rate of Return on Equity (%)	15.00%	15.00%	15.00%	15.00%	15.00%
Allowable RoE	83.40	89.62	89.66	89.66	89.66

1.7.8 O&M expenses

1.7.8.1 Regulation 24 (iv) of the UPERC Generation Regulation 2019 deals with the Operation and Maintenance expenses of power plants. Para 24 (iv) is reproduced below:

(iv) Operation and Maintenance Expenses:

(a) For Coal based-generating stations except those covered under clause (b):

(in Rs. lakh/MW)

Financial Year	Up to 200/210/250 MW sets	300/330/350 MW sets	500 MW sets	600 MW & above sets
2019-20	32.96	27.74	22.51	20.26
2020-21	34.12	28.71	23.30	20.97
2021-22	35.31	29.72	24.12	21.71
2022-23	36.56	30.76	24.97	22.47
2023-24	37.84	31.84	25.84	23.96

(b)

(in Rs lakh/MW)

Financial year	Harduganj (U#7)	Paricha (U#2))
2019-20	64.80	38.80
2020-21	67.07	40.16
2021-22	69.43	41.57
2022-23	71.86	43.03
2023-24	74.39	44.54

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1.7.8.2 The Commission, accordingly, has approved the O&M expenses as below:

Approved O&M Expenses

(Figures in Rs. Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	Approved	Approved	Approved	Approved	Approved
Capacity	1000	1000	1000	1000	1000
Norms (Lakh/MW)	32.96	34.12	35.31	36.56	37.84
O&M Expenses	329.60	341.20	353.10	365.60	378.40

1.7.9 Interest on Working Capital

1.7.9.1 In line with Regulation 25(v), the commission has approved the Interest on Working capital for the five-year control period, i.e. from FY 2019-20 to FY 2023-24.

(Figures in Rs. Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	Approved	Approved	Approved	Approved	Approved
Cost of Coal -50 (20+30) days	195.41	195.41	195.41	195.41	195.41
Cost of Main Secondary Fuel Oil -2months	8.82	8.80	8.80	8.80	8.82
O&M Expenses -one month	27.47	28.43	29.43	30.47	31.53
Maintenance Spares @ 20% of O&M	65.92	68.24	70.62	73.12	75.68
Receivables 45 Days	262.46	265.76	265.66	265.62	265.39
Total Working Capital	560.08	566.65	569.92	573.42	576.83
Rate of Interest	12.05%	12.05%	12.05%	12.05%	12.05%
Interest on Working Capital	67.49	68.28	68.68	69.10	69.51

1.7.9.2 Weighted Average Cost and Gross Calorific Value of Coal and Oil

The Commission has considered cost accountant certified Fuel details for January 2020, February 2020, and March 2020 and the average values for January 2020 to March 2020 worked out as under:

Particulars		Jan-20	Feb-20	Mar-20	Average
Weight Average Landed Cost of Coal	Rs. /MT	2686.93	2889.10	3011.38	2862.47
Weighted Average GCV of Coal as receipt basis	Kcal/KG	3644.00	3700.00	3732.00	3692.00
Weighted Average Landed Cost of Oil	Rs. /KL	57426.85	5444.69	51879.65	38250.40
Weighted Average GCV of Oil as receipt basis	Kcal/Ltr.	9020.00	9060.00	9027.00	9035.67

1.7.10 Annual Fixed Charges

Multi-Year Tariff and ARR for FY 2019-20 to FY 2023-24 for OBRA-B (UPRVNL)



1.7.10.1 Based on discussion in above sections, the fixed charges as claimed by the Petitioner and approved by the Commission in present True-up order is shown in the Table below:

(Figures in Rs. Crore)

Particulars	2019-20 (Audited)	2020-21 (Audited)	2021-22 (Provisional)	2022-23 (Projected)	2023-24 (Projected)
Depreciation	106.11	114.12	114.32	145.17	185.19
Interest on Loan Capital	64.70	63.17	50.18	78.06	114.63
Return on Equity	83.41	89.64	89.79	113.56	144.41
O&M Expenses	329.60	341.20	353.10	365.60	378.40
Interest on Working Capital	39.48	44.38	41.86	55.33	57.29
Total Capacity Charges	623.30	652.51	649.25	757.71	879.93
Energy ex bus	5933	5933	5933	5933	5933
FC per unit	1.05	1.10	1.09	1.28	1.48

(Figures in Rs. Crore)

Particulars	FY 2019-20 Approved	FY 2020-21 Approved	FY 2021-22 Approved	FY 2022-23 Approved	FY 2023-24 Approved
Depreciation	106.12	114.11	114.14	114.14	114.14
Interest on Loan Capital	64.69	63.14	49.94	36.68	23.42
Return on Equity	83.40	89.62	89.66	89.66	89.66
O&M Expenses	329.60	341.20	353.10	365.60	378.40
Interest on Working Capital	67.49	68.28	68.68	69.10	69.51
Total Capacity charge	651.30	676.34	675.51	675.17	675.12
Ex-bus energy sent out (MU)	5949	5933	5933	5933	5949
FC/unit (Rs./Kwhr)	1.09	1.14	1.14	1.14	1.13

1.7.11 Variable Charges

1.7.11.1 Based on the operation norms provided in the UPERC Generation Tariff Regulations, 2019 and the Commission's decisions in the foregoing paragraphs, the representative variable charge per unit of generation for the MYT period of FY 2019-20 to F 2023-24 is as given in the following table.

Particulars	Unit	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Capacity	MW	1000	1000	1000	1000	1000
PLF	%	75%	75%	75%	75%	75%
Gross Station Heat Rate	Kcal/kWh	2755	2755	2755	2755	2755
Auxiliary Energy Consumption	%	9.70%	9.70%	9.70%	9.70%	9.70%
Gross Generation	MU	6588	6570	6570	6570	6588
Auxiliary Energy Consumption	MU	639	637	637	637	639
Ex-Bus Energy sent out	MU	5949	5933	5933	5933	5949
Specific oil Consumption	ml/kWh	2.10	2.10	2.10	2.10	2.10
Wt. Avg. GCV of Oil	Kcal/Lt	9035.67	9035.67	9035.67	9035.67	9035.67
Price of Oil	Rs./KL	38250.40	38250.40	38250.40	38250.40	38250.40

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Wt. Avg. GCV of Coal	kCal/kg	3692.00	3692.00	3692.00	3692.00	3692.00
GCV of Primary Fuel less 85 Kcal/Kg on account of variation during storage	kCal/kg	3607	3607	3607	3607	3607
Price of Coal	Rs./MT	2862.47	2862.47	2862.47	2862.47	2862.47
Heat Contribution from SFO	Kcal/kWh	18.97	18.97	18.97	18.97	18.97
Oil Consumption	KL	13834.8	13797	13797	13797	13834.8
Heat Contribution from Coal	Kcal/kWh	2736.03	2736.03	2736.03	2736.03	2736.03
Specific Coal Consumption	kg/kWh	0.76	0.76	0.76	0.76	0.76
Coal Consumption	MMT	5.00	4.98	4.98	4.98	5.00
Total Oil Cost	Rs. Cr	52.92	52.77	52.77	52.77	52.92
Total Cost of Coal	Rs. Cr	1430.44	1426.53	1426.53	1426.53	1430.44
Total Fuel Cost	Rs. Cr	1483.35	1479.30	1479.30	1479.30	1483.35
Rate of Energy Charge from Secondary Fuel Oil ex-bus	Paise/kWh	8.90	8.90	8.90	8.90	8.90
Rate of Energy Charge from Coal ex-Bus	Paise/kWh	240.45	240.45	240.45	240.45	240.45
Rate of Energy Charge ex-bus	Paise/kWh	249.35	249.35	249.35	249.35	249.35

1.7.12 Carrying Cost

1.7.12.1 UPRVUNL is billing fixed charges for the period, so far, covered in control period, from 1st April 2019 till date, @ fixed charges approved by the Commission vide its order dated April 29, 2016, in Petition No. 1025 and 1026 of 2015 and Order dated January 18, 2017, in the Petition No. 1117 and 1126 of 2016. The yearly billed amount for FY 2019-24, till date, would depend upon the availability and energy scheduled during different months in the year.

1.7.12.2 The carrying cost on the Multi Year Tariff amount for control period FY 2019-20 to FY 2023-24 shall be worked out till the date of order as per the prevailing Bank Rates in terms of Regulation 15(3) of the UPERC Tariff Regulations, 2019. In accordance with the UPERC Tariff Regulations the rate of interest for Carrying Cost shall be equal to the One Year Marginal Cost of Lending Rate (MCLR) of Interest as specified by State Bank of India as on 1st April of the respective year plus 350 basis points for control period 01.04.2019 till the date of order. Above effective rates are as tabulated below:

Year	Effective Rate of Interest for respective FY
FY 2019-20	12.05%
FY 2020-21	11.25%
FY 2021-22	10.50%
FY 2022-23	10.50%
FY 2023-24	12.00%

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1.7.13 Other Provisions

(a) Recovery of Application fee and Statutory Charges

In addition to the above tariff the Petitioner shall be allowed to recover the payment of statutory charges like electricity duty, water cess, payment to Pollution Control Board, and Regulatory Fee paid to the Commission, on the production of details of actual payments made and duly supported with the certificate of the Statutory Auditors in accordance with Regulation 33 of UPERC Generation Tariff Regulation, 2019.

(b) Sharing of Benefits

Financial gains shared between the Petitioner and Beneficiaries in accordance with Regulation 34 of UPERC Generation Tariff Regulation, 2019.

(c) Incentive

Incentive to all thermal power stations shall be at 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.

(d) Rebate

For payment of bills of capacity charges and energy charges beneficiaries shall be eligible for rebate in accordance with Regulation 37 of UPERC Generation Tariff Regulation, 2019.

(e) Late Payment Surcharge

For late payment of bills of capacity and Regulation beneficiaries shall pay late payment surcharge in accordance with the Regulation 38 of the Generation Tariff Regulation 2019.

With the above directions, the Petition is disposed of.

**(Vinod Kumar Srivastava)
Member (Law)**

**(Raj Pratap Singh)
Chairman**

Place: Lucknow

Dated: 24.05.2023

