



Multi Year Tariff and ARR for 1X660 MW Harduaganj Extn II TPS for the Period 2021-22 to FY 2023-24 for UPRVUNL



Uttar Pradesh Electricity Regulatory Commission

Lucknow

Petition No. 1527 of 2019

And

Petition No. 1936 of 2022

Filed by

Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL)

IN THE MATTER OF:

MYT FOR 1X660 MW Harduaganj Extn. II TPS (FY 201-22 TO FY 2023-24)

Lucknow

Dated: 24-05-2023

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Table of Contents

1. BACKGROUND & RECORD OF PROCEEDINGS.....	4
1.1 Background.....	4
1.2 Regulatory Framework.....	10
1.3 UPRVUNL MYT Petition for the Control Period (FY 2021-22 To FY 2023-24) 11	
1.4 UPPCL Counter Affidavit dated 23.01.2023 and UPRVUNL reply dated 06.03.2023.....	14
1.5 Tariff Design	17
1.6 Provisional MYT for FY 2019-20 to FY 2023-24: Capacity (Fixed) Charges..	18
*20. Additional Capitalization:	18

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2



Petition Nos. 1527 of 2020 and 1936 of 2023

Before

UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

LUCKNOW

Date of Order: 24.05.23

Present:

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

**IN THE MATTER OF: HARDUAGANJ Extn.II TPS (2x250 MW) PETITION FOR
DETERMINATION OF MYT OF FY 2019-20 to FY 2023-24.**

M/s Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL)
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, UPRVUNL
2. Shri Shailendra Tiwari, Consultant, UPRVUNL
3. C.E(Commercial), UPRVUNL
4. Shri Hari Shyam, S.E(Commercial), UPRVUNL
5. Shri Raj Kumar Verma, A.E(Commercial), UPRVUNL
6. Shri Nitish Gupta, Counsel, UPPCL
7. Ms. Parichita Chowdhury, Advocate, UPPCL

**Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for
Harduaganj Extn II (1x660 MW) (UPRVNL)**



8. Shri Deepak Raizada, C.E (PPA), UPPCL
9. Shri Haroon Aslam, S.E(PPA), UPPCL
10. Shri Avdhesh Kumar Verma, UPRVUP
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 'UPRVUNL' or the 'Petitioner'), is a company incorporated on 25th August 1980 with the principal object of generating electricity. UPRVUNL 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 UPRVUNL owns, maintains, and operates the following generating stations:

Table 1

Present Installed Capacity and Derated capacity of UPRVUNL 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

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Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for Harduaganj Extn II (1x660 MW) (UPRVNL)



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
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 UPRVNL 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

Chronology of filing main Petition and additional submissions

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 UPRVNL TPS and Provisional Tariff for Harduaganj Extension Stage-II TPS.

**Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for
Harduaganj Extn II (1x660 MW) (UPRVNL)**



Submission	Date of submission	Details of submission
Additional Submission-1	03-01-2020	<p>Additional Submission-1 was made before the Commission with addition of Projected additional capitalisation as below:</p> <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 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</p>

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Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for Harduaganj Extn II (1x660 MW) (UPRVNL)



Submission	Date of submission	Details of submission
		<p>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 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.</p>
Additional Submission-4	02-06-2022	<p>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.</p>
Re-submission of MYT Petition	02-12-2022	<p>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:</p> <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

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Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for Harduaganj Extn II (1x660 MW) (UPRVNL)



Submission	Date of submission	Details of submission
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.

1.1.5 Prayers

- To accept the Re-submission of the Multi-Year Tariff of Harduaganj Extn.II 1X660 MW TPS for the Control Period comprising FY 2021-22 to FY 2023-24.
- To approve Annual Revenue Requirement for Harduaganj Extn.II for each of the financial years for the period of FY 2021-22 to FY 2023-24.
- Permit recovery of expenses understated /not considered in the Petition subsequent to the submission of this Petition.
- 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.
- To pass such orders as 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 03.11.22, directed UPRVUNL to file separate Petition for each of the power station including additional submission, if any, within a month i.e., 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 21.11.22. 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.

1.1.8 The Commission admitted the Petition for further processing with direction that the Petitioner shall furnish further information/clarifications, if any, as deemed necessary

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**Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for
Harduaganj Extn II (1x660 MW) (UPRVNL)**



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.

1.1.9 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.

1.1.10 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.

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- (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, UPRVNL cannot be allowed cost towards R&M as well as Special Allowance. Further, for the Claimed R&M cost, UPRVNL has not provided the details such as Detailed Project Report, Cost Benefit Analysis, etc.
- (j) UPRVNL 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.

Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for Harduaganj Extn II (1x660 MW) (UPRVNL)



- 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.
- 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 Provisional MYT Petition for the Control Period (FY 2021-22 To FY 2023-24)

Petition No. 1936/2022

- 1.3.1 The Petitioner, as per the direction of the Commission resubmitted the MYT and ARR petition for FY 2020-21 to FY 2023-24 for Harduaganj Extn.II (1X660 MW) in Petition No. 1936/2022 based on and along with provisional accounts for FY 2021-22 and Auditor certificate dated 30.04.2022 certifying expenditure as on 08.02.2022. 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 projected by the Petitioner in Rs. Cr.

Particulars	2021-22	2022-23	2023-24
Depreciation	302.14	306.53	312.81
Interest on Loan Capital	462.05	432.88	406.06
Return on Equity	259.74	263.52	268.91
O&M Expenses	143.29	148.30	153.52

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**Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for
Harduaganj Extn II (1x660 MW) (UPRVNL)**



Interest on Working Capital	54.27	54.21	54.24
Total Capacity Charges	1221.48	1205.43	1195.54
Energy ex bus	4607	4607	4607
FC per unit	2.65	2.62	2.59

Table 4 Calculation of Energy charges projected by the Petitioner in Rs. Cr.

Description	Unit	2021-22	2022-23	23023-24
Capacity	MW	660	660	660
PLF	%	85%	85%	85%
Gross Station Heat Rate	KCAL/KWH	2081	2081	2081
Auxiliary Energy Consumption	%	6.25%	6.25%	6.25%
Energy Generation - Gross	MU	4,914	4,914	4,914
Auxiliary Energy Consumption	MU	307	307	307
Ex-bus Energy Sent Out	MU	4,607	4,607	4,607
Specific Oil Consumption	ML/KWH	0.50	0.50	0.50
Wt. Avg. GCV of Oil	KCAL/LT	10,570	10,570	10,570
Price of Oil	RS./KL	93,275	93,275	93,275
Wt. Avg. GCV of Coal	KCAL/KG	3727	3727	3727
GCV of Primary Fuel (Coal) less 85 Kcal/Kg on account of variation during storage	KCAL/KG	3642	3642	3642
Price of Coal	RS./MT	5543	5543	5543
Heat Contribution from SFO	KCAL/KWH	5.29	5.29	5.29
Oil Consumption	KL	2457	2457	2457
Heat Contribution from Coal	KCAL/KWH	2076	2076	2076
Specific Coal Consumption	KG/KWH	0.57	0.57	0.57
Coal Consumption	MMT	2.80	2.80	2.80
Total Cost of Oil	RS CR	22.92	22.92	22.92
Total Cost of Coal	RS CR	1,552.49	1,552.49	1,552.49
Total Fuel Cost	RS CR	1,575.41	1,575.41	1,575.41
Rate of Energy Charge from Secondary Fuel Oil ex-bus	PAISE/KWH	4.97	4.97	4.97
Rate of Energy Charge from Coal ex-bus	PAISE/KWH	336.97	336.97	336.97
Rate of Energy Charge ex-bus per kWh	PAISE/KWH	341.94	341.94	341.94

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.

Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for Harduaganj Extn II (1x660 MW) (UPRVNL)



- 1.3.3 The Petitioner vide email dated 12.05.2023 has submitted the PPA dated 16.01.13 and SPPA dated 27.12.2016. The PPA and SPPA was approved by the Commission vide its Order dated 1.02.14 and 25.10.2017 respectively.
- 1.3.4 The Petitioner in its revised Petition no. 1936/2022 has submitted that there shall be additional capitalization to the tune of Rs. 239.89 Crore spreads across the Control period of FY 2021-22 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 2021-22 to FY 2023-24

Sl.No.	Name of the Asset ¹	FY 22-23	FY 23-24
		Additions During the Year as per provisional accounts	Additions During the Year as per provisional accounts
5	BLDGS-THERMO-ELECT.GENE. PLANT	18.74	8.03
7	RESIDENTIAL COLONY FOR STAFF	3.76	1.61
8	OTHER BUILDING	0.31	0.13
9	HYDRAULIC WORKS	8.31	3.56
10	OTHER CIVIL WORK	4.27	1.83
13	TURBINE GEN. STEAM PWR GENE.	67.55	28.95
14	AUXILIARIES IN STEAM PWR PLANT	30.97	13.28
15	COAL HANDLING PLANT & HANDLG EQPT	2.48	1.06
16	PLT-FOUNDTN HYDEL PWR-GENE-PLT	10.75	4.61
17	TRANS PLT TRANFS RATING 100KVA	4.80	2.06
19	SWITCH GEAR INCDG CABLE CONNTS	5.80	2.49
20	BATTERIES INCLU. CHARG EQPT	0.22	0.09
21	COMMU. EQPT TELEPH. & TELE	4.00	1.71
23	OTHER MISC. EQPT.	0.25	0.11
24	LINES CABLE NETWORK ETC.	0.76	0.33
27	HEAVY VEHICLES	0.01	0.00
29	OTHER VEHICLES	0.06	0.02
30	FURNITURES & FIXTURES	0.03	0.01
38	CAPITAL SPARES GENRATING STATIONS (95%)	4.87	2.09
	TOTAL	167.92	71.97

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**1.4 UPPCL Counter Affidavit dated 23.01.2023 and UPRVNL 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.

Harduaganj Extension Stage II TPS achieved COD on 08.02.2022. but UPRVNL has claimed for additional capitalization on account of Boiler Plant & Machinery, Trans Plt. Transfs. Rating 100 KVA, Furniture & Fixture, Computer, others, etc. However, whether such expenses have been actually incurred or not, is not clear from the instant Petition. Therefore, it is submitted that UPRVNL be directed to first provide details of actually incurred additional expenditure. It is only then that this Commission may consider such claims of UPRVNL. Until such time as the details are not provided by UPRVNL, its claims for additional capitalization are premature and are liable to be rejected.

Petitioner Reply

UPRVNL has submitted that the Second revised scheme was accorded approval of the Government of Uttar Pradesh vide letter no. 941/24-1-2020-3485/2009 dated 15th July 2020. The second revised estimated cost of the Harduaganj Extension Stage II project was estimated at Rs 6011.83 Crores. The total expenditure incurred up to COD i.e., as on 8th February 2022 is to the tune of Rs. 5,771.94 crore and the statutory auditor certificate in this regard has already been submitted along with the Petition.

Based on provisional expenditure till 8th February 2022, UPRVNL has submitted the Annual Revenue Requirement for determination of Provisional Tariff before the Commission and balance project cost has

14



been estimated for expenditure in FY 2022-23 and FY 2023-24. In addition to the above, additional capital expenditure for Rs. 167.92 crore in FY 2022-23 and Rs. 71.97 Crore in FY 2023-24 is the part of Revised estimated capital cost as approved by Government of Uttar Pradesh in second revised scheme.

In view of the above, Petitioner has prayed the Commission to kindly consider the projected additional capital expenditure and allow the same to UPRVNL at this stage.

(c) Means of Finance

UPPCL Objection

In absence of the additional capitalisation as being claimed by UPRVNL, there will be a significant impact on Debt and Equity to the tune of about INR 167.92 Crores and INR 71.97 Crores respectively. Accordingly, Depreciation of INR 15.07 Crores may be disallowed for the period of FY 2021-24.

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. 906.41 Crore instead of INR 921.48 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 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

**Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for
Harduaganj Extn II (1x660 MW) (UPRVNL)**



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 to 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

Interest in Loan of Rs. 1278.46 Cr against claim of UPRVUNL of Rs. 1300.98 Cr may be allowed.

Petitioner Submission

The Petitioner has considered interest rate as per the Commission's Order for FY 2014-15 to FY 2018-19.

(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 153.20 Crore.

Petitioner Submission

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

**Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for
Harduaganj Extn II (1x660 MW) (UPRVNL)**



UPPCL submitted that based on the submission made the Annual Fixed Charge ought to be changed and accordingly, UPPCL assessed the AFC of INR 2887.07 Crore instead of INR 3622.45 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 Tariff Design

1.5.1 The tariff is structured on the following basis:

- a) The data of GFA, NFA, Debt, and Equity, has been considered as baseline data for the calculation of provisional tariff for the MYT period from FY 2021-22 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.
- 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.
- 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 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 provisional MYT for Thermal Power Stations of the Petitioner for FY 2019-2020 to FY 2023-2025 has been worked out adopting the above elaborate methodology. -

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**Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for
Harduaganj Extn II (1x660 MW) (UPRVNL)**



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

1.6.1 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 6 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	11.88%	weighted average of the loan portfolio
O&M Expenses	Normative	As per Regulation
Interest on Working Capital	12.05%	As per regulation

1.6.2 Additional Capitalization

The unit no 10 COD achieved is as under:

Table 7: COD of Harduaganj Extn. II 1x660 MW-TPS

TPS	Unit No.	Capacity	COD
Harduaganj Extension	10	660 MW	09.02.2022

1.6.2.1 UPRVUNL has claimed most of the expenditure based on provisional accounts for FY 22-23 and FY 23-24, without citing relevant provision of Tariff Regulations pertaining to add-cap up to and within cutoff date. As per Regulation 20 (1) of the UPERC Tariff Regulations, 2019 additional capitalisation for a new project is required to be actually incurred after COD and up to the cut-off date. The said provision is extracted below for ease:

20. Additional Capitalization:

(1) *The additional capital expenditure in respect of a new project or an existing project, on the following counts within the original scope of work as per Detailed Project Report (DPR), actually incurred after the date of commercial operation and up to the cutoff date may be admitted by the Commission, subject to prudence check:*

- (i) *Deferred liabilities;*
- (ii) *Works deferred for execution;*



- (iii) *Procurement of initial capital spares in the original scope of work, subject to ceiling specified in these Regulations;*
- (iv) *Liabilities to meet award of arbitration or for compliance of the Directions or Order of any statutory authority or Order or decree of a Court;*
- (v) *On account of change in law; and*
- (vi) *Force majeure events:*

Provided that original scope of work along with estimates of expenditure shall be submitted along with the application for provisional tariff.

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the generating station.

Therefore, the Petitioner is directed to provide relevant supporting documents in terms of applicable Tariff Regulations such as deferred liabilities, works deferred for execution, and original scope of work etc., at the time of determination of final tariff before the Commission. At this stage of determination of provisional tariff, the Commission does not consider it prudent to allow any additional capital expenditure for recovery.

1.6.3 GFA Balance

Harduaganj Extension Stage II TPS consisting of 1x660 MW supercritical Unit had been envisaged as a brownfield project in the land space available of the erstwhile Harduaganj 'A' units. The project has been installed, as an extension project, in the premises of Harduaganj Thermal Power Project, the site being located near Kasimpur village near Aligarh city of Uttar Pradesh. The Land required for the project was already owned by UP Rajya Vidyut Utpadan Nigam Ltd and the project was to be developed after dismantling of Power Block and old colony and relocation of 132/11/6.6 KV Substation of UPPCL.

As per the Petitioner's submission, the scheme was accorded approval of the Government of Uttar Pradesh vide letter no. 2801/24-1-2011-3485/2009 dated 22nd September 2011. The initial estimated cost of the said project was estimated

**Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for
Harduaganj Extn II (1x660 MW) (UPRVNL)**



at Rs 4826.5 Crores. The additional expenditure, in light of the MOEF&CC notification S.O. 3305(E) dated 7th December 2015, necessitating installation of SCR and FGD systems, to the tune of Rs 674.48 Crores was accorded approval from the Government vide letter no 2390/24-1-2016-2356/2016 dated 24th November 2016, thereby increasing the overall project cost to Rs 5500.98 crores.

After that, the second revised scheme was accorded approval of the Government of Uttar Pradesh vide letter no. 941/24-1-2020-3485/2009 dated 15th July 2020. The second revised estimated cost of the said project was estimated at Rs 6011.83 Crores. The cost estimate of the Thermal Power Station as submitted is given in table below:

Table 8

S No	Name/No. of Construction / Supply / Service Package	Cost Estimate of (Rs Crore)
1	Preliminary & Civil Works	
1.1	Land & Civil Construction Works	811.97
1.2	Physical Contingency	12.18
	Sub-Total 1	824.15
2	Plant & Equipment	
2.1	Mechanical Equipment	2,203.55
2.2	Electrical Equipment	151.17
2.3	Coal Transportation System	43.51
2.4	Spares	102.67
2.5	Misc. Tools & Plants	9.04
2.6	Customs Duty	128.21
2.7	Excise Duty	143.94
2.8	Central Sales Tax	31.28
2.9	Physical Contingency	42.20
	Sub-Total 2	2,855.57
3	Pre- Commissioning Expenses	18.40
4	Project Management	
4.1	Establishment Audit & Accounts	82.79
4.2	Consultancy	36.80
4.3	training of O&M Staff	2.00
4.4	Losses on Stocks	0.50
	Sub-Total 4	122.09
5	Interest During Construction (IDC)	874.23
6	Working Capital Margin (WCM)	132.05
7	installation of SCR and FGD	574.48
8	Increase in IDC	100.00
9	Total	5500.98
	Second Revised cost	
1	Add: Increase due to GST impact, price variation and Additional scope of work	597.00
2	Less: Due to decrease in IDC	86.14
	Total Second Revised Cost	6011.83

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The Commission has noted that the total expenditure incurred up to COD i.e., as on 8th February 2022 is Rs. 5,771.94 crore and the statutory auditor certificate in this regard has been placed on record. The unit of this power station has already been commissioned on 9th February 2022. Thus, based on provisional expenditure till 8th February 2022, the determination of Provisional Tariff is detailed in the upcoming sections and the allowable ARR of the station would be finalized after determination of final Project cost. The Petitioner is directed to place on record various details such as scheduled COD, details of award placement and reason of delay and cost over-run for determination of final tariff.

1.6.4 Regulation 15(2), 15(3) and 15(4) of the UPERC Generation Regulations, 2019 provide the basis for determination of provisional tariff based on the Statutory Auditor Certificate based on the capital cost actually incurred. The relevant extract is reproduced below:

"(2) In case of a generating station declared under commercial operation on or after the date of commencement of these Regulations, an Application for fixation of tariff shall be made as per Appendix II to these Regulations, for determination of Provisional tariff within 180 days prior to the anticipated date of commercial operation based on the Capital Expenditure actually incurred up to the date of making of the Application or a date prior to making of the Application, duly audited and certified by the Statutory Auditors, and the provisional tariff shall be charged from the date of commercial operation of the respective Unit of the generating station.

(3) The generating company shall make a fresh Application as per Appendix II to these Regulations, for determination of Final tariff based on actual Capital Expenditure incurred up to the date of commercial operation of the generating station, duly audited and certified by the Statutory Auditors.

Provided further that over or under recovery of charges by the generating company on account of Provisional tariff shall be subject to retrospective adjustment on the basis of final tariff determined by the Commission. The generating company, on the basis of such Final tariff, shall calculate the amount of under or over recovery of charges and bill such amount to be recovered or paid by it from or to the beneficiary (ies), for the period the Provisional tariff remained effective, within six months of determination of final tariff, along with simple interest calculated at rate equal to Bank Rate as on 1st April of the relevant year.

(4) Where application for determination of tariff of a new project has been filed before the Commission in accordance with clause 15(2) of these Regulations, the Commission may consider to grant provisional tariff up to 90% of the Annual Fixed Cost of the project claimed in the Application subject to adjustment as per proviso to



clause 15(3) of these Regulations after the final tariff order has been issued.

Provided that recovery of Capacity Charges and Energy Charges, as the case may be, in respect of the existing or new project for which provisional tariff has been granted shall be made in accordance with the relevant provisions of these Regulations."

1.6.5 Accordingly, the Commission, for the purpose of the instant petition, has considered the addition @90%to the opening GFA balance, as on 08.02.2022, based on the provisional accounts / Auditor's certificate up to COD. Therefore, the Commission approves the following GFA for FY 2021-24:

Table 9

(Figures in Rs. Crore)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24
	Approved	Approved	Approved
Opening GFA	0.00	5194.746	5194.75
Capitalization	5194.75	0.00	0.00
Deletions			
Closing GFA	5194.746	5194.75	5194.75
Average GFA	2597.37	5194.75	5194.75

1.6.6 Depreciation

1.6.6.1 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.

Table 10

Depreciation approved by the Commission for FY 2019-24 Period

(Figures in Rs. Crore)

Particulars	FY 2021-22	FY 2022-23	FY 2024-25
	Approved	Approved	Approved
Capital Cost including additional capitalization	5194.76	5194.75	5194.75
Depreciable value =90% of Capital cost (excluding Land cost)	4675.28	4675.28	4675.27
Cumulative depreciation approved up to beginning of respective financial year	0.00	135.96	407.89
Remaining Depreciation	4675.28	4539.32	4267.39
Depreciation approved in the instant Petition	135.96	271.92	271.92
Cumulative depreciation approved up to end of respective financial year	135.96	407.89	679.81

1.6.7 Means of Finance



1.6.7.1 Accordingly, the Commission has approved the normative equity, debt, and depreciation for the Period of FY 2021-22 to FY 2023-24. The GFA, Debt, equity and Net fixed asset as approved are as below:

Table 21

(Figures in Rs. Crore)

Opening GFA	0.00	5194.756	5194.76
Additions	5194.76	0	0
Deletions	0.00	0	0
Closing GFA	5194.76	5194.76	5194.76
Closing Net GFA	5058.79	4786.87	4514.95
Financing			
Opening Equity	0.00	1558.43	1558.43
Additions @30%	1558.43	0.00	0.00
Deletion	0.00	0.00	0.00
Closing Equity	1558.43	1558.43	1558.43
Open. Accumulated Depreciation	0.00	135.96	407.89
Depreciation during the Year	135.96	271.92	271.92
Closing Accumulated Depreciation	135.96	407.89	679.81
Opening Debts	0.00	3500.37	3228.44
Additions@70%	3636.33	0.00	0.00
Less: Depreciation (Normative Repayment)	135.96	271.92	271.92
Decapitalisation	0.00	0.00	0.00
Closing Debts	3500.37	3228.44	2956.52

1.6.8 Interest on loan

1.6.8.1 The Commission has considered the addition to the loan as of 8th Feb 2022, and the repayment for the control period shall be equal to the depreciation allowed for the year. The Commission has considered the loan portfolio weighted average rate of interest, as submitted by the Petitioner, for the calculation of the Interest on Loan for the control period of FY 2021-24.

Table 32

(Figures in Rs. Crore)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24
	Approved	Approved	Approved
Opening Loan	0.00	3500.36	3228.44
Addition	3636.32	0.00	0.00
Normative Repayment	135.96	271.92	271.92
Decapitalisation	0	0	0
Closing Loan	3500.36	3228.44	2956.51
Average Debt	1750.18	3364.40	3092.47
Interest Rate	11.88%	11.88%	11.88%
Interest on Loan	207.92	399.69	367.39

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Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for Harduganj Extn II (1x660 MW) (UPRVNL)



1.6.9 Return on Equity

1.6.9.1 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:

Table 43

(Figures in Rs. Crore)

Particular	FY 2021-22	FY 2022-23	FY 2023-24
	Approved	Approved	Approved
Opening Equity	0.00	1558.42	1558.42
Additions	1558.4238	0	0
Less: Decapitalisation	0	0	0
Closing Equity	1558.42	1558.42	1558.42
Rate of Return on Equity (%)	15.00%	15.00%	15.00%
Allowable RoE	116.88	233.76	233.76

1.6.10 O&M expenses

1.6.10.1 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

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

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Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for Harduaganj Extn II (1x660 MW) (UPRVNL)



Table 54

(Figures in Rs. Crore)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24
	Approved	Approved	Approved
Capacity	660	660	660
Norms (Lakh/MW)	21.71	22.47	23.26
O&M Expenses (Rs. Cr.)	143.29	148.30	153.52

1.6.11 Interest on Working Capital

1.6.11.1 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 2021-22 to FY 2023-24.

Table 65

(Figures in Rs. Crore)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24
	Approved	Approved	Approved
Cost of Coal -50 (20+30) days	212.68	212.68	212.68
Cost of Main Secondary Fuel Oil -2months	3.82	3.82	3.83
O&M Expenses -one month	11.94	12.36	12.79
Maintenance Spares @ 20% of O&M	28.66	29.66	30.70
Receivables 45 Days	276.64	332.93	329.19
Total Working Capital	533.74	591.45	589.20
Rate of Interest	12.05%	12.05%	12.05%
Interest on Working Capital	64.32	71.27	71.00

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

The Commission has considered cost accountant certified Fuel details for July, August and September 2022 as submitted by the Petitioner and the average values for July 2022 to September 2022 worked out as under:

Table 76

(Figures in Rs. Crore)

Particulars		Jul-22	Aug-22	Sep-22	Average
		Weight Average Landed Cost of Coal	Rs./MT	5664.05	5654.07
Weighted Average GCV of Coal as receipt basis	Kcal/KG	3865.00	3763.00	3552.00	3726.67
Weighted Average Landed Cost of Oil	Rs./KL	91866.00	94328.80	93628.50	93274.43
Weighted Average GCV of Oil as receipt basis	Kcal/Ltr.	10570.00	10570.00	10570.00	10570.00

1.6.12 Annual Fixed Charges

1.6.12.1 Based on discussion in above sections, the fixed charges as claimed by the Petitioner and approved by the Commission in present provisional tariff order is shown in the Table below:

Table 87

(Figures in Rs. Crore)

Particulars	2021-22	2022-23	2023-24
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**Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for
Harduaganj Extn II (1x660 MW) (UPRVNL)**



	claimed	claimed	claimed
Depreciation	302.14	306.53	312.81
Interest on Loan Capital	462.05	432.88	406.06
Return on Equity	259.74	263.52	268.91
O&M Expenses	143.29	148.30	153.52
Interest on Working Capital	54.27	54.21	54.24
Total Capacity Charges	1221.48	1205.43	1195.54
Energy ex bus	4607	4607	4607
FC per unit	2.65	2.62	2.59

Particulars	Rs./Crs		
	FY 2021-22 Approved	FY 2022-23 Approved	FY 2023-24 Approved
Depreciation	135.96	271.92	271.92
Interest on Loan Capital	207.92	399.69	367.39
Return on Equity	116.88	233.76	233.76
O&M Expenses	143.29	148.30	153.52
Interest on Working Capital	64.32	71.27	71.00
Total Capacity charge	668.37	1124.95	1097.59
Ex-bus energy sent out (MU)	4607	4607	4620
FC/Unit (Rs./Kwhr)	1.45	2.44	2.38

1.6.13 Variable Charges

1.6.13.1 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 2014-15 to F 2018-19 is as given in the following table.

Table 98

(Figures in Rs. Crore)

Particulars	Unit	FY 2021-22	FY 2022-23	FY 2023-24
Capacity	MW	660	660	660
PLF	%	85%	85%	85%
Gross Station Heat Rate	Kcal/kWh	2081	2081	2081
Auxiliary Energy Consumption	%	6.25%	6.25%	6.25%
Gross Generation	MU	4914	4914	4928
Auxiliary Energy Consumption	MU	307	307	308
Ex-Bus Energy sent out	MU	4607	4607	4620
Specific oil Consumption	ml/kWh	0.50	0.50	0.50
Wt. Avg. GCV of Oil	Kcal/Lt	10570.00	10570.00	10570.00
Price of Oil	Rs./KL	93274.43	93274.43	93274.43
Wt. Avg. GCV of Coal	kCal/kg	3726.67	3726.67	3726.67
GCV of Primary Fuel less 85 Kcal/Kg on account of variation during storage	kCal/kg	3641.67	3641.67	3641.67
Price of Coal	Rs./MT	5542.70	5542.70	5542.70
Heat Contribution from SFO	Kcal/kWh	5.29	5.29	5.29
Oil Consumption	KL	2457.18	2457.18	2463.912
Heat Contribution from Coal	Kcal/kWh	2075.72	2075.72	2075.72

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**Multi-Year Tariff and ARR for FY 2021-22 to FY 2023-24 for
Harduaganj Extn II (1x660 MW) (UPRVNL)**



Specific Coal Consumption	kg/kWh	0.57	0.57	0.57
Coal Consumption	MMT	2.80	2.80	2.81
Total Oil Cost	Rs. Cr	22.92	22.92	22.98
Total Cost of Coal	Rs. Cr	1552.59	1552.59	1556.84
Total Fuel Cost	Rs. Cr	1575.51	1575.51	1579.82
Rate of Energy Charge from Secondary Fuel Oil ex-bus	Paise/kWh	4.97	4.97	4.97
Rate of Energy Charge from Coal ex-Bus	Paise/kWh	336.99	336.99	336.99
Rate of Energy Charge exbus	Paise/kWh	341.97	341.97	341.97

1.7 Commission's Directions

- 1.7.1 The provisional tariff as determined above shall be applicable from date of commercial operation i.e., 09.02.2022. The Petitioner shall be entitled to recovery of application fee and other statutory charges as per Regulation 33 of UPERC Generation tariff regulations, 2019.
- 1.7.2 The Petitioner, in terms of UPERC Generation Tariff Regulations, 2019 clause 15(3), is required to file fresh application as per Appendix II to the Regulations, for determination of final tariff based on actual Capital Expenditure incurred up to the date of commercial operation basis the audited account for the year FY 21-22. The Petitioner is also directed to place on record various details such as scheduled COD, details of award placement and reason of delay and cost over-run for determination of final tariff.
- 1.7.3 Over or under recovery of charges by the Petitioner on account of provisional tariff shall be subject to retrospective adjustment on the basis of final tariff determined by the Commission in terms of Regulation 15(s) of UPERC Generation tariff regulation, 2019.


(Vinod Kumar Srivastava)
Member (Law)


(Raj Pratap Singh)
Chairman

Place: Lucknow
Dated: 24.05.2023

