

**Office of Chief Engineer
Commercial Unit**



U.P. Rajya Vidyut Utpadan Nigam Ltd.
14th floor, Shakti Bhawan Extn.
Lucknow-226001
Tel. No.- 0522-2288056/2287030
CIN :U40101UP1980SGC005065
E-mail: gm.commercial@uprvunl.org
cecommercialunl@gmail.com

No. 513/UNL/CE(Comml.)/MYT (2019-24)/Anp-D

Date: 30, November-2022
07, December-2022

✓ The Secretary,
U.P. Electricity Regulatory Commission
Vibhuti Khand-II, Gomti Nagar
Lucknow-2260010



Subject:- Re-Submission of MYT Petition of 2x500 MW Anpara-'D' Thermal Power Stations of UPRVUNL for FY 2019-20 to 2023-24.

Dear Sir,

Kindly find enclosed herewith MYT Petition for 2x500 MW Anpara-'D' Thermal Power Station of UPRVUNL for FY 2019-20 to 2023-24 in 06 copies (one original + 05 photocopies + 01 soft copy) as per UPERC (Terms and Conditions of Generation Tariff) Regulations, 2019 in compliance of directive of Hon'ble Commission during hearing on dated 03.11.2021 on Petition No. 1527/2019 for MYT of various Thermal Power Stations of UPRVUNL for FY 2019-20 to 2023-24.

The MYT Petitions (2019-24) for various TPS of UPRVUNL were originally submitted to Hon'ble Commission vide this office single covering letter no. 834/UNL/CE(Comml.)/MYT (2019-24), dt. 06.11.2019 (copy attached), with station wise fees @ Rs 5000/- per MW and total Rs 2,96,50,000/- for 10 Stations in form of DD (No. 557620 dt. 05.11.2019 State Bank of India) in favour of Secretary, UPERC, payable at Lucknow as per Part-D, Sl. No. 4 (b) under "Schedule of Fees" of UPERC (Fee & Fines) Regulation-2010.

Submitted for kind consideration of the Hon'ble Commission.
Encl: As above.

Yours Sincerely,

(Ashok Kumar Seth)
Chief Engineer(Commercial)

No. /UNL/CE(Comml.)/MYT (2014-19) Anp-D
Copy to the following respondents for their kind information:-

Date: 30, November-2022

1. M.D., U.P. Power Corporation Ltd., 7th floor, Shakti Bhawan, 14 Ashok Marg, Lucknow.
2. M.D., Madhyanchal Vidyut Vitran Nigam Ltd., P.N. Road, Gokhale Marg, Lucknow.
3. M.D., Poorvanchal Vidyut Vitran Nigam Ltd., Vidyut Nagar, DLW, Varanasi.
4. M.D., Pashchimanchal Vidyut Vitran Nigam Ltd., Victoria Park, Meerut.
5. M.D., Dakshinanchal Vidyut Vitran Nigam Ltd., Urja Bhawan, Delhi Bypass Road, Agra.
6. M.D., Kanpur Electric Supply Co. Ltd., KESA House, Civil Lines, Kanpur.

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Submitted for kind consideration of the Hon'ble Commission.
Encl: As above.

Yours Sincerely,

(Ashok Kumar Seth)
Chief Engineer(Commercial)

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E-mail: gm.commercial@uprvunl.org
cecommercialunl@gmail.com

7. Chief Executive Officer, Noida Power Company Ltd., H-Block, Alpha-II Sector, Gr Noida.
8. Chief Engineer (PPA), UPPCL, 14th floor, Shakti Bhawan Ext, Lucknow.

No. /UNL/CE(Comml.)/MYT (2019-24)/Anp-A

Date: 30 , November- 2021

Copy to the followings for their kind information:-

1. PS to Managing Director, UPRVUNL, 7th floor, Shakti Bhawan, 14 Ashok Marg, Lucknow.
2. Director (Project & Commercial), UPRVUNL, 8th floor, Shakti Bhawan Ext, Lucknow.
3. Director (Technical), UPRVUNL, 8th floor, Shakti Bhawan Ext, Lucknow.
4. Director (Finance), UPRVUNL, 8th floor, Shakti Bhawan Ext, Lucknow.

(Ashok Kumar Seth)
Chief Engineer(Commercial)

**ANPARA D 2x500 MW
THERMAL POWER STATION**

**RE-SUBMISSION OF MYT PETITION FOR THE PERIOD FY
2019-20 TO FY 2023-24**

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मुख्य अभियन्ता (वाणिज्य)
उ०प्र०रा०वि०उ०नि०लि०
14वां तल, शक्ति भवन विस्त
लखनऊ-226001



UP RAJYA VIDYUT UTPADAN NIGAM LTD

INDEX

S No	Particulars	Page No
1	Form 1	2
2	Form 2 & Affidavit	3
	Anpara D 2x500 MW Thermal Power Station	5
1.1	Gross Fixed Assets	5
1.2	Means of Finance	6
1.3	Interest on Loan	7
1.4	Depreciation	8
1.5	Return on Equity	9
1.6	O&M Expenses	10
1.7	Interest on Working Capital	11
1.8	Summary of Annual Fixed Charges	12
2	Energy Charges	13
2.1	Fuel Cost Adjustment	14
3	Prayer	15

List of Annexures

Annexure No	Particulars	Page No
Annexure-A	Tariff Filing Formats	17-17
Annexure-B	Supporting Documents for Projected Expenses for FY 2022-23 and FY 23-24	69-87
Annexure-1	UPRVUNL Audited Balance Sheet for FY 2019-20	88-124
Annexure-2	UPRVUNL Audited Balance Sheet for FY 2020-21	125-161
Annexure-3	UPRVUNL Provisional Balance Sheet for FY 2021-22	162-187
Annexure-4	Coal and Oil Forms for the months of July to September 2022	188-248
Annexure-5	Statutory Auditor Certificate for the period FY 2020-21 to FY 2021-22 for capital cost	249-252

[Signature]

[Signature]

[Signature]
मुख्य अभियन्ता (वाणिज्य)
उ०प्र०रा०वि०उ०नि०लि०
14वां तल, शक्ति भवन विस्तार
लखनऊ-226001

FORM-1

(See Regulation 30)

**BEFORE THE HON'BLE UTTAR PRADESH ELECTRICITY REGULATORY
COMMISSION GOMTINAGAR, LUCKNOW**

Receipt Register No.: _____

PETITION NO. _____

IN THE MATTER OF

RE-SUBMISSION OF MULTI YEAR TARIFF PETITION FOR APPROVAL OF ANNUAL
REVENUE REQUIREMENT AND DETERMINATION OF TARIFF FOR FY 2019-20 TO
FY 2023-24 IN RESPECT OF ANPARA D 2x500 MW THERMAL POWER STATION OF UTTAR
PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED (UPRVUNL)

AND

IN THE MATTER OF

UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED (UPRVUNL),
SHAKTI BHAWAN, 14-ASHOK MARG, LUCKNOW.

APPLICANT

V/s

UTTAR PRADESH POWER CORPORATION LIMITED (UPPCL),
SHAKTI BHAWAN, 14-ASHOK MARG, LUCKNOW.

MADHYANCHAL VIDYUT VITRAN NIGAM LTD.
PN ROAD, LUCKNOW.



POORVANCHAL VIDYUT VITRAN NIGAM LTD.
132 KV S/S BHIKARI VIDYUT NAGAR, VARANASI

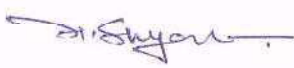
PASCHIMANCHAL VIDYUT VITRAN NIGAM LTD.
VICTORIA PARK, MEERUT

DAKSHINANCHAL VIDYUT VITRAN NIGAM LTD.
GALINA ROAD AGRA.

KANPUR ELECTRICITY SUPPLY CO. LTD.
KESA HOUSE, KANPUR

RESPONDENTS





मुख्य अभियन्ता (वाणिज्य)
उ०प्र०रा०वि०उ०नि०लि०
14वां तल, शक्ति भवन विस्तार
लखनऊ-226001

FORM-2
(See Regulation 31)
**BEFORE THE HON'BLE UTTAR PRADESH ELECTRICITY REGULATORY
COMMISSION GOMTINAGAR, LUCKNOW**

Receipt Register No.: _____

PETITION NO. _____

IN THE MATTER OF

RE-SUBMISSION OF MULTI YEAR TARIFF PETITION FOR APPROVAL OF ANNUAL REVENUE REQUIREMENT AND DETERMINATION OF TARIFF FOR FY 2019-20 TO FY 2023-24 IN RESPECT OF ANPARA D 2x500 MW THERMAL POWER STATION OF UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED (UPRVUNL).

AND

IN THE MATTER OF

UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED (UPRVUNL),
SHAKTI BHAWAN, 14-ASHOK MARG, LUCKNOW.

APPLICANT

VS

UTTAR PRADESH POWER CORPORATION LIMITED (UPPCL),
SHAKTI BHAWAN, 14-ASHOK MARG, LUCKNOW.

MADHYANCHAL VIDYUT VITRAN NIGAM LTD.
PN ROAD, LUCKNOW.



POORVANCHAL VIDYUT VITRAN NIGAM LTD.
132 KV S/S BHIKARI VIDYUT NAGAR, VARANASI

PASCHIMANCHAL VIDYUT VITRAN NIGAM LTD.
VICTORIA PARK, MEERUT


DAKSHINANCHAL VIDYUT VITRAN NIGAM LTD.
GALINA ROAD AGRA.

KANPUR ELECTRICITY SUPPLY CO. LTD.
KESA HOUSE, KANPUR

RESPONDENTS




मुख्य अभियन्ता (वाणिज्य)
उ०प्र०रा०वि०स०नि०लि०
14वां तल, शक्ति भवन विस्तार
लखनऊ-226001



उत्तर प्रदेश UTTAR PRADESH

65AE 473618

AFFIDAVIT

I, Ashok Kumar Seth, Son of Late Shakal Narain Ram Seth aged about 53 Years, resident of D-201, Celebrity Greens, Sushant Golf City, Lucknow 226030 do hereby solemnly affirm and state as under:

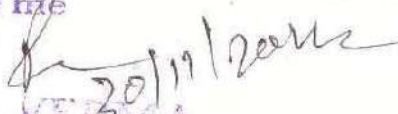
1. I say that I am Chief Engineer, Commercial UPRVUNL, the Applicant in the above matter and am duly authorized by the said Applicant to swear the present affidavit.
2. I say that I have read the contents of the Re-submission of ARR and MYT Petition filed by the Petitioner (applicant) and I have understood the contents of the same.
3. That the contents of the Re-submission of ARR and MYT Petition filed by the Applicant are based on the information available with the Applicant in the normal course of business and believed by me to be true.
4. I say that the Text, Appendixes and Annexure to the Petition are the true and correct copies of their original.



DEPONENT

VERIFICATION

I, the deponent above named, do hereby verify the contents of the above affidavit to be true to the best of my knowledge, no part of it is false and nothing material has been concealed therefrom.

Sworn and Verified at Lucknow for the _____, 2022
Before me


R.D. VERMA
Adv. & NOTARY
Lucknow U.P. INDIA
Regd No 31/04/2020


DEPONENT
मुख्य अभियंता (वित्तिक)

1. ANPARA D 2x500 MW THERMAL POWER STATION

As per direction of Hon'ble Commission on date 03.10.2022 during hearing on Petition No. 15272019 and order dated 21.11.2022 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.

Anpara D True-up Petition for FY 2014-15 to FY 2018-19 is under consideration before the Hon'ble Commission. Petitioner hereby considered the True-up Petition closing numbers for Tariff determination. This section presents the ARR and MYT Petition for FY 2019-20 to FY 2023-24 in respect of **Anpara D 2x500 MW Thermal Power Station**.

The audited accounts of UPRVUNL for the period FY 2019-20 and FY 2020-21 and Provisional accounts for FY 2021-22 are attached with the Petition and marked as Annexure-1, Annexure-2 and Annexure-3 respectively.

The Actual capitalization details of Anpara D TPS for up to 31st March 2022 based on Statutory Auditor Certificate is as below:

S No	Particulars	As on 31-03-2021 (Audited) (Rs Crore)	As on 31-03-2022 (Audited) (Rs Crore)
A-1	Interest During Construction (IDC) and other Finance Charges	2,349.48	2,349.48
A- 2	Hard Cost (Other than IDC and Finance Charges)	5,191.83	5,459.16
A (1+2)	Total Capital Cost	7,541.31	7,808.64
B	CREDIT TO CAPITALISATION		
B- 1	Penalty and other charges	158.53	158.53
B- 2	Infirm Power (Pre COD)	164.28	164.28
B- 3	Decapitalized Value	209.50	209.50
B (1+2+3)	Total Credit Amount	532.31	532.31
C=A-B	Value as per Books of Accounts	7,009.00	7,276.33

Statutory Auditor Certificate for FY 2020-21 and FY 2021-22 is attached with Petition and marked as **Annexure-5**.

1.1 GROSS FIXED ASSETS

Regulation 17(3) of the UPERC Generation Regulations, 2019 provide the basis for determination of final tariff of an existing project based on the admitted capital cost which shall include:

- the capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;

- b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these Regulation; and
- c) Expenditure on account of renovation and modernization as admitted by this Commission in accordance with these Regulation.
- d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility,

Accordingly, the Petitioner for the purpose of this MYT petition for the control period FY 2019-20 to FY 2023-24 has considered the opening GFA balance as on 01.04.2019 equal to the closing GFA balance as submitted by UPRVUNL in final true-up petition for FY 2014-15 to FY 2018-19.

In this MYT Tariff Petition, the Petitioner is submitting the detailed asset wise list of its fixed assets for the control period FY 2019-20 to FY 2023-24. Additional capitalization for FY 2019-20 and FY 2020-21 based on the audited accounts, FY 2021-22 based on the provisional accounts and FY 2022-23 and FY 2023-24 based on the projections.

Accordingly, the following table depicts the proposed Gross Fixed Asset balances along with the yearly capitalizations (if any) for the Control period FY 2019-20 to FY 2023-24:

Table: - Gross Fixed Assets Summary - FY 2019-20 to FY 2023-24

Particulars	(All figures in Rs Crs)				
	2019-20 (Audited)	2020-21 (Audited)	2021-22 (Audited)	2022-23 (Projected)	2023-24 (Projected)
Opening GFA	7,156.62	6,997.24	7,009.00	7,276.33	7,326.33
Capitalization	36.03	11.76	267.33	50.00	209.22
Deletions	195.41	-	-	-	-
Closing GFA	6,997.24	7,009.00	7,276.33	7,326.33	7,535.55
HQ Allocation	0.21	-	-	-	-
Opening GFA	0.21	-	-	-	-
HQ Allocation	0.05	0.11	1.28	21.35	4.23
Net Closing GFA	6,997.50	7,009.11	7,277.62	7,347.68	7,539.79

Table: - Gross Fixed Assets Summary including HQ Allocations- FY 2019-20 to FY 2023-24

Particulars	(All figures in Rs Crs)				
	2019-20 (Audited)	2020-21 (Audited)	2021-22 (Audited)	2022-23 (Projected)	2023-24 (Projected)
Opening GFA	7,156.83	6,997.50	7,009.37	7,277.98	7,349.33
Capitalisation	36.08	11.87	268.61	71.35	213.45
Deletions	195.41	-	-	-	-
Closing GFA	6,997.50	7,009.37	7,277.98	7,349.33	7,562.78

1.2 MEANS OF FINANCE

The Hon'ble Commission in its order dated 5th September 2022 and 3rd October 2022 had prescribed a normative approach of financing of the capital expenditure in the ratio of 70% debt and 30% equity in

line with the Tariff Regulations. Further the allowable depreciation had been considered as normative loan repayment.

In order to maintain consistency in approach, the Petitioner has considered the aforementioned philosophy and calculated the normative debt and normative equity. The opening values of accumulated depreciation, normative loan and normative equity as on 1.4.2019 has been adopted from the true-up petition filed for FY 2014-15 to FY 2018-19. Accordingly, the gross fixed asset balance, the net fixed asset balance and its financing is presented in the table below:

Table: Calculation of GFA, NFA and its financing

Figures in Rs Crore

MoA	2019-20 (Audited)	2020-21 (Audited)	2021-22 (Audited)	2022-23 (Projected)	2023-24 (Projected)
Opening GFA	7,156.83	6,997.50	7,009.37	7,277.98	7,349.33
Additions	36.08	11.87	268.61	71.35	213.45
Deletions	195.41	-	-	-	-
Closing GFA	6,997.50	7,009.37	7,277.98	7,349.33	7,562.78
Closing Net FA	5,862.73	5,501.74	5,389.55	5,070.61	4,888.39
Financing:					
Opening Equity	2,147.05	2,099.25	2,102.81	2,183.39	2,204.80
Additions	10.82	3.56	80.58	21.40	64.04
Less: Deletions	58.62	-	-	-	-
Closing Equity	2,099.25	2,102.81	2,183.39	2,204.80	2,268.83
Open. Accumulated Depreciation	757.54	1,134.77	1,507.63	1,888.43	2,278.72
Depreciation during the year	377.22	372.87	380.80	390.29	395.67
Closing Accumulated Depreciation	1,134.77	1,507.63	1,888.43	2,278.72	2,674.40
Opening Debts	3,870.19	3,381.44	3,016.88	2,824.11	2,483.76
Additions	25.25	8.31	188.03	49.94	149.42
Less: Depreciation (normative repayment)	377.22	372.87	380.80	390.29	395.67
Less: Deletions	136.79	-	-	-	-
Closing Debts	3,381.44	3,016.88	2,824.11	2,483.76	2,237.51

1.3 INTEREST ON LOAN CAPITAL

Regulation 24(ii) of the UPERC Generation Regulations, 2019 provide the basis for computation of Interest on loan capital. It states that the Interest on loan capital shall be computed on the loans arrived at in the manner indicated in these Regulation i.e in the approved Debt: Equity ratio. The loan outstanding as on 1st April 2019 shall be worked out as the gross loan as per Regulation minus cumulative repayment as admitted by the Commission up to 31st March 2019. The repayment for any

(Signature)

(Signature)

year during the Tariff Period shall be deemed to be equal to the depreciation allowed for that Year. In case of decapitalisation of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.

Further, the rate of the interest shall be the weighted average rate of interest calculated on the basis of actual loans at the beginning of each year and shall be adjusted based on actual loan each year accordingly. If there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average of interest shall be considered.

Further, it is reiterated that the Petitioner has considered a normative tariff approach with a gearing of 70:30 as considered by the Hon'ble Commission in its True-up Order dated 5th September 2022 and 3rd October 2022. In this approach, 70% of the capital expenditure undertaken in any year has been considered to be financed through loan and balance 30% has been considered to be funded through equity contributions.

Allowable depreciation for the year has been considered as normative loan repayment. The weighted average rate of interest of overall long term loan portfolio for FY 2018-19 has been considered for FY 2019-20 to FY 2023-24, as it seems to be fair and equitable.

Considering the debt worked out as above and applying the rate of 11.40%, the interest on loan capital has been worked out in the table below:

Table: Summary of Interest on Loan for the Control Period

(All figures in Rs Crs)

Particulars	2019-20 (Audited)	2020-21 (Audited)	2021-22 (Audited)	2022-23 (Projected)	2023-24 (Projected)
Opening Debts	3,870.19	3,381.44	3,016.88	2,824.11	2,483.76
Additions	25.25	8.31	188.03	49.94	149.42
Less: Normative repayment	377.22	372.87	380.80	390.29	395.67
Less: Decapitalisation	136.79	-	-	-	-
Closing Debts	3,381.44	3,016.88	2,824.11	2,483.76	2,237.51
Average Debt	3,625.82	3,199.16	2,920.50	2,653.94	2,360.63
Rate of Interest	11.40%	11.40%	11.40%	11.40%	11.40%
Interest on Loan	413.34	364.70	332.94	302.55	269.11

1.4 DEPRECIATION

The Petitioner submits that the depreciation as per accounts is calculated as per the prescription of New Companies Act, 2013 which is depicted in the accounting policies annexed with the audited accounts. However, the Tariff Regulations prescribe that the eligible depreciation shall be calculated annually,

based on straight line method over the useful life of the asset and the rates prescribed in Appendix III of such regulations. It is noteworthy of mentioning that the Appendix III prescribes distinct depreciation rates for each class of assets.

The Petitioner has provided the asset class wise list of gross fixed assets in Form 11 of the tariff formats submitted along with this petition. Accordingly, the Petitioner has calculated the eligible depreciation based on the rates prescribed in the tariff regulations.

The rates of depreciation prescribed by the Hon'ble Commission in Appendix 3 of the Generation Tariff Regulations prescribe different depreciation rates for different assets. In such circumstances it would only be fit to consider station wise depreciation calculated at the rates prescribed in Appendix 3 for different asset classes and not at the average rate.

While calculating the allowable depreciation, the petitioner has considered the residual life of the asset as 10% and depreciation has been considered up to maximum of 90% of the historical capital cost of the asset being in line with the provisions of the Generation Regulations, 2019.

The value of Gross Fixed Assets has been discussed in foregoing sections. The Petitioner has calculated station wise depreciation, on the Gross Fixed Asset (GFA) value of all the plants owned by it, at the rates specified in the Appendix 3 of Generation Tariff Regulations 2019.

The allowable depreciation is depicted in the table below:

Table: Depreciation Summary for the Control Period

(All figures in Rs Crs)

Particulars	2019-20 (Audited)	2020-21 (Audited)	2021-22 (Audited)	2022-23 (Projected)	2023-24 (Projected)
Capital Cost including additional capitalization	7076.85	7003.12	7143.36	7313.35	7455.75
Depreciable value=90% of capital cost (excluding Land cost)	6273.99	6284.68	6526.43	6590.64	6782.75
Cumulative depreciation approved upto respective financial year	757.54	1134.77	1507.63	1888.43	2278.72
Depreciation approved in the instant Petition	377.22	372.87	380.80	390.29	395.67
Cumulative depreciation approved upto respective financial year	1134.77	1507.63	1888.43	2278.72	2674.40







मुख्य अभियन्ता (वाणिज्य)
उ०प्र०रा०वि०उ०नि०लि०
14वां तल, शक्ति भवन विस्तार
लखनऊ-226001

Particulars	2019-20 (Audited)	2020-21 (Audited)	2021-22 (Audited)	2022-23 (Projected)	2023-24 (Projected)
Depreciation as per Annexure III of the Regulations	377.22	372.87	380.80	390.29	395.67
Allowable Depreciation subject to maximum of 90% of the Capital Cost	377.22	372.87	380.80	390.29	395.67

1.5 RETURN ON EQUITY

Regulation 24(i) of the UPERC Generation Regulations, 2019 provides the base for determination of Return on Equity for the purpose of computation of fixed charges. The said regulations state that the Return on equity shall be computed in rupee terms on the equity base determined in accordance with these Regulation @ 15.0% per annum.

The equity base for the thermal power station as on 01.04.2019 has been considered as the closing equity balance for FY 2018-19 as submitted by the petitioner in its final true-up petition for FY 2018-19. Thereafter 30% of the total capitalisation has been considered to be funded from equity infusion in each year of the control period.

As per the Generation Tariff Regulations, equity would be eligible for return when the asset is commissioned. Accordingly the table below provides the summary of equity base eligible for return and the Return on Equity claimed by the petitioner for the control period:

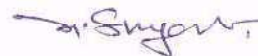
Table: Return on Equity for the Control Period (FY 2019-20 to FY 2023-24)

(All figures in Rs Crs)

Particulars	2019-20 (Audited)	2020-21 (Audited)	2021-22 (Audited)	2022-23 (Projected)	2023-24 (Projected)
Opening Equity	2,147.05	2,099.25	2,102.81	2,183.39	2,204.80
Additions	10.82	3.56	80.58	21.40	64.04
Less: Decapitalisation	58.62	-	-	-	-
Closing Equity	2,099.25	2,102.81	2,183.39	2,204.80	2,268.83
Rate of Return on Equity (%)	15.0%	15.0%	15.0%	15.0%	15.0%
Allowable RoE	318.47	315.15	321.46	329.11	335.52

It is to humbly to bring to the attention of the Hon'ble Commission that based on the Government Order dated 31st July 2017 and subsequent adoption of the same by Board of Directors on 9th April 2018 of the Petitioner, the Petitioner would continue to bill the beneficiary considering the RoE at 2% Or at rate as decided by the BoD from time to time but within the ceiling of 15%.





1.6 OPERATION & MAINTENANCE EXPENSES

Regulation 24(iv) of the UPERC Generation Regulations, 2019 deals with the allowance of O&M expenses. The Hon'ble Commission in the generation tariff regulations – Para 25 (iv)(a) (a) have prescribed the yearly O&M expenses for the control period FY 2019-20 to FY 2023-24 based upon the Installed Capacity for the thermal power stations other than plant for Harduaganj (U#7)&Parichha (U#2) TPS. The Hon'ble Commission has provided special dispensation in the O&M norms for the Thermal power plants namely Harduaganj (U#7) & Parichha (U#2) TPS, the same have been provided in the Para 24(iv)(b) of the Generation Regulation.

Accordingly, based on the above stated norms the O&M expenses allowed for the power station for the Control period is depicted in the table below:

Table: O&M expense for the Control Period

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Capacity (MW)	1000	1000	1000	1000	1000
Norms (Lakh/MW)	22.51	23.30	24.12	24.97	25.84
O&M Expenses (Rs Cr)	225.10	233.00	241.20	249.70	258.40

Further the Hon'ble Commission in its Para 25(iv) Note (c) has stated that the expenses on account of water charges shall be paid additionally at actuals subject to prudence check.

Provided that the generating station shall submit the details of year wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance or special allowance or claimed as a part of additional capitalization or consumption of stores and spares and renovation and modernization.

1.7 INTEREST ON WORKING CAPITAL

The Petitioner has worked out the working capital requirement based on the normative parameters prescribed in Para 24 (v) of the UPERC Generation Tariff Regulations 2019. The rate of interest on working capital has been considered on normative basis as the Bank Rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-20 to 2023-24 in which the generating station or a unit thereof is declared under commercial operation, whichever is later.

Further the Hon'ble Commission has provided the following norms for the purpose of calculating of the normative working capital for coal based generating stations:

- Cost of coal for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal stock storage capacity whichever is lower

- ii. Cost of secondary fuel oil for two months corresponding to the target availability and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;
- iii. Operation and Maintenance expenses including water charges for one month;
- iv. Maintenance spares @ 20% of operation and maintenance expenses; and
- v. Receivables equivalent to 45days of capacity charges and energy charges for sale of electricity calculated on the target availability.

Based on the above premise, the computation of interest on working capital for the control period for kind consideration and approval of the Hon'ble Commission are as per table below:

(All figures in Rs Crs)

Anpara D	2019-20	2020-21	2021-22	2022-23	23023-24
Coal Cost	825.95	601.50	918.73	1,237.41	1,237.41
Oil Cost	13.28	3.17	21.80	37.20	37.20
Total Fuel Cost	839.23	604.67	940.52	1,274.61	1,274.61
Annual Fixed Charges	1380.52	1323.66	1318.49	1320.45	1307.59
Total Receivables	2,219.75	1,928.33	2,259.01	2,595.06	2,582.21

Table: Interest on Working Capital for the Control Period

(All figures in Rs Crs)

Harduaganj	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of Coal	45.26	32.96	50.34	67.80	67.80
Cost of Main Secondary Fuel Oil	2.21	0.53	3.63	6.20	6.20
O & M Expenses	18.76	19.42	20.10	20.81	21.53
Maintenance Spares	45.02	46.60	48.24	49.94	51.68
Receivables	273.67	237.74	278.51	319.94	318.35
Total Working Capital	384.92	337.24	400.82	464.69	465.57
Rate of Interest	12.05%	11.25%	10.50%	10.50%	10.50%
Interest on Working Capital	46.38	37.94	42.09	48.79	48.88

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1.8 SUMMARY OF ANNUAL CAPACITY (FIXED) CHARGES

In view of the above submissions, the fixed cost of the Petitioner's Anpara D TPS for the control period under consideration works out at as under:


Table: Summary of Annual Capacity (Fixed) Charges for the Control Period

(All figures in Rs Crs)

Particulars	2019-20 (Audited)	2020-21 (Audited)	2021-22 (Audited)	2022-23 (Projected)	2023-24 (Projected)
Depreciation	377.22	372.87	380.80	390.29	395.67
Interest on Loan Capital	413.34	364.70	332.94	302.55	269.11
Return on Equity	318.47	315.15	321.46	329.11	335.52
O&M Expenses	225.10	233.00	241.20	249.70	258.40
Interest on Working Capital	46.38	37.94	42.09	48.79	48.88
Total Capacity Charges	1380.52	1323.66	1318.49	1320.45	1307.59
Energy ex bus	6981	6981	6981	6981	6981
FC per unit	1.98	1.90	1.89	1.89	1.87




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2. ENERGY CHARGES

The following table highlights the normative parameters which the Hon'ble Commission has prescribed for the control period of FY 2019-20 to FY 2023-24:

Table Normative Operating Parameters for the Control Period

As per Tariff Generation Regulations for MYT FY 2020 to FY 2023

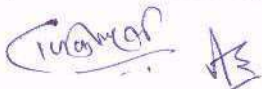
Normative Parameters	Unit	2019-20	2020-21	2021-22	2022-23	2023-24
Target Availability	%	85%	85%	85%	85%	85%
Target PLF	%	85%	85%	85%	85%	85%
Aux Energy Consumption	%	6.25%	6.25%	6.25%	6.25%	6.25%
Gross Heat Rate	Kcal/kWh	2374	2374	2374	2374	2374
Specific Fuel Oil Cons	ml/kWh	0.50	0.50	0.50	0.50	0.50

For the purpose of calculations of energy charges for FY 2019-20 to FY 2020-21, the average of the actual GCV of coal and oil and actual cost thereof for the particular Financial year has been taken for the purpose of calculations of energy charges. For FY 2022-23 and FY 2023-24, the average of the actual GCV of coal and oil and actual cost thereof of the ending three months (July to September 2022) has been taken for the purpose of calculations.

Energy charges for the control period have been projected based on the operating parameters prescribed in the Generation Tariff Regulations. A summarized position of energy charges proposed for the control period is given in Table below. (The details are available in tariff filing formats prescribed by the Hon'ble Commission)

Table: Calculation of Energy Charges for the Control Period

Description	Unit	2019-20	2020-21	2021-22	2022-23	2023-24
Capacity	MW	1000	1000	1000	1000	1000
PLF	%	85%	85%	85%	85%	85%
Gross Station Heat Rate	Kcal/kWh	2374	2374	2374	2374	2374
Auxiliary Energy Consumption	%	6.25%	6.25%	6.25%	6.25%	6.25%
Energy Generation - Gross	MU	7,446	7,446	7,446	7,446	7,446
Auxiliary Energy Consumption	MU	465	465	465	465	465
Ex-bus Energy Sent Out	MU	6,981	6,981	6,981	6,981	6,981
Specific Oil Consumption	ml/kWh	0.50	0.50	0.50	0.50	0.50
Wt. Avg. GCV of Oil	KCal/Lt	10,380	9,612	9,160	8,901	8,901
Price of Oil	Rs./KL	55,083	46,543	55,994	99,914	99,914
Wt. Avg. GCV of Coal	kCal/kg	3696	3739	3675	3572	3572
GCV of Primary Fuel (Coal) less 85 Kcal/Kg on account of variation during storage	kCal/kg	3611	3654	3590	3487	3487
Price of Coal	Rs./MT	2479	2689	2414	2445	2445
Heat Contribution from SFO	Kcal/kWh	5.19	4.81	4.58	4.45	4.45






Description	Unit	2019-20	2020-21	2021-22	2022-23	2023-24
Oil Consumption	KL	3723	3723	3723	3723	3723
Heat Contribution from Coal	Kcal/kWh	2369	2369	2369	2370	2370
Specific Coal Consumption	kg/kWh	0.66	0.65	0.66	0.68	0.68
Coal Consumption	MMT	4.89	4.83	4.91	5.06	5.06
Total Cost of Oil	Rs Cr	20.51	17.33	20.85	37.20	37.20
Total Cost of Coal	Rs Cr	1,211.19	1,298.10	1,186.63	1,237.41	1,237.41
Total Fuel Cost	Rs Cr	1,231.70	1,315.43	1,207.48	1,274.61	1,274.61
Rate of Energy Charge from Secondary Fuel Oil ex-bus	Paise/kWh	2.94	2.48	2.99	5.33	5.33
Rate of Energy Charge from Coal ex-bus	Paise/kWh	173.51	185.96	169.99	177.26	177.26
Rate of Energy Charge ex-bus per kWh	Paise/kWh	176.44	188.44	172.98	182.59	182.59

2.1 FUEL COST ADJUSTMENT

Regulation 28 (ii) of the Generation Tariff Regulations 2019, provides the mechanism for claiming the adjustment of rate of energy charges on account of variation in price and heat values of fuels.

“(a) Initially, Gross Calorific Value of coal shall be taken (on as received basis) of the preceding three months. Any variation shall be adjusted on month to month basis on the basis of Gross Calorific Value of coal received and landed cost incurred by the generating company for procurement of coal or oil, as the case may be. No separate petition need to be filed with the Commission for fuel price adjustment. In case of any dispute, an appropriate application in accordance with Uttar Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations 2004, as amended from time to time or any statutory reenactment thereof, shall be made before the Commission.”

Accordingly, the Petitioner would raise bills for recovery of Fuel Cost Adjustment.





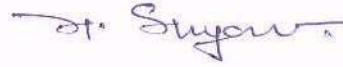
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3. PRAYER

The Petitioner respectfully prays followings to the Hon'ble Commission:

1. The Hon'ble Commission is requested to Accept this Re-submission of Multi Year Tariff of Anpara D 2x500 MW TPS for the control period comprising FY 2019-20 to FY 2023-24.
2. The Hon'ble Commission is requested to approve Annual Revenue Requirement for Anpara D for each of the Financial years for the period 2019-20 to 2023-24.
3. Permit recovery of expenses understated/ not considered in this Petition subsequent to the submission of this petition.
4. The Hon'ble Commission is requested to Condone any inadvertent omissions / errors / short comings and permit the applicant to add /change /modify / alter this Petition and make further submissions as may be required at later stages.
5. The Hon'ble Commission is requested to Pass such orders as Hon'ble Commission may deem fit and proper and necessary in the facts and circumstances of the case, to grant relief to the Petitioner.





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