

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.520/UNL/CE(Comm.)/MYT (2019-24)/Harduaganj Ext-II

Date: 30, November- 2022

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

Subject:- Re-Submission of MYT Petition of 1x660 MW Harduaganj Extension-II Thermal Power Stations of UPRVUNL for FY 2019-20 to 2023-24.

Dear Sir,

Kindly find enclosed herewith MYT Petition for 1x660 MW Harduaganj Extension-II Thermal Power Station of UPRVUNL for FY 2019-20 to 2023-24 in 06 copies (one original + 0 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 of 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(Comm.)/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(Comm.)/MYT (2014-19)/ Harduaganj Ext-II Date: 30, November-2022
Copy to the following respondents for their kind information:-

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.



**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. 520/UNL/CE(Comml.)/MYT (2019-24)/Harduaganj Ext-II

Date: 30, November- 2022

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

Subject:- Re-Submission of MYT Petition of 1x660 MW Harduaganj Extension-II Thermal Power Stations of UPRVUNL for FY 2019-20 to 2023-24.

Dear Sir,

Kindly find enclosed herewith MYT Petition for 1x660 MW Harduaganj Extension-II 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(Commecial)

No. /UNL/CE(Comml.)/MYT (2014-19)/ Harduaganj Ext-II
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.

**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

6. M.D., Kanpur Electric Supply Co. Ltd., KESA House, Civil Lines, Kanpur.
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)/Harduaganj Ext-II Date: 30 , November- 2022
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)

**COMMERCIAL
UNIT**



U.P. Rajya Vidyut Utpadan Nigam Ltd.
14th floor, Shakti Bhawan Extn.
Lucknow-226001
Telephone No.- 0522-2288056/2287030
CIN :U40101UP1980SCC005065
E-mail: gm.commercial@uprvunl.org

No. **834** /UNL/CE(Comml.)/MYT (2019-24)

Date: **06**, November-2019

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

**Subject:- Petitions for ARR & Multi Year Tariff of various Thermal Power Stations of
UPRVUNL for FY 2019-20 to 2023-24.**

Dear Sir,

Kindly find enclosed herewith Petitions for determination of ARR & Multi Year Tariff of the following Thermal Power Stations including provisional Tariff of upcoming Harduaganj Extension Stage-II (1x660 MW) of UPRVUNL in 06 copies (one original + 05 photocopies + 01 soft copy) for FY 2019-20 to FY 2023-24 as per UPERC (Terms & Conditions for Generation Tariff) Regulation-2019.

The details are mentioned in Table hereunder:

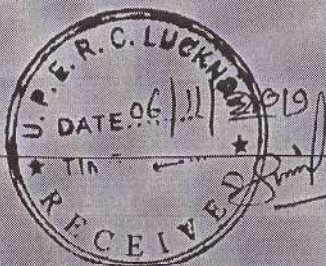
Sl No.	Name of Power Station	Unit	Total Capacity (MW)	Fee @ Rs 5000/- per MW. Max Rs 50 Lacs per Station (Rs)
1.	Anpara- 'A' TPS	3x210	630	31,50,000/-
2.	Anpara- 'B' TPS	2x500	1000	50,00,000/-
3.	Anpara- 'D' TPS	2x500	1000	50,00,000/-
4.	Obra- 'B' TPS	5x200	1000	50,00,000/-
5.	Harduaganj TPS (U#7)	1x110	110	5,50,000/-
6.	Harduaganj Extn TPS	2x250	500	25,00,000/-
7.	Parichha TPS (U#2)	1x110	110	5,50,000/-
8.	Parichha Extn TPS	2x210	420	21,00,000/-
9.	Parichha Extn Stage-II TPS	2x250	500	25,00,000/-
10.	Harduaganj Ext Stage-II	1x660	660	33,00,000/-
Total			5930	2,96,50,000/-

The fee amount of Rs 2,96,50,000/- (Rs Two Crore, Ninety six Lacs, Fifty thousand only) in form of Demand Draft (No. 557620, dt 05.11.2019 issued from State Bank of India) in favour of "Secretary, UPERC", payable at Lucknow [as per 'Schedule of Fees' of UPERC (Fee & Fines) Regulations-2010, Part-D Sl. No.-4(b)] is also enclosed alongwith Petitions.

Submitted for kind consideration of Hon'ble Commission.

Encl: Petitions as as above.

Yours Sincerely,



(Ramesh Chandra)
Chief Engineer(Commercial)

Office letter /CE (C)
242

**COMMERCIAL
UNIT**



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

No. **834** /UNL/CE(Comml.)/MYT (2019-24)

Date: **06**, November-2019

Copy alongwith enclosures to the following respondents for their kind information:-

1. M.D., U.P. Power Corporation Ltd., 7th floor, Shakti Bhawan, 14 Ashok Marg, Lucknow.
2. M.D., Madyanchal Vidyut Vitran Nigam Ltd., P.N. Road, Gokhale Marg, Lucknow.
3. M.D., Poorvaranchal Vidyut Vitran Nigam Ltd., 132KV S/S Bhikhari Vidyut Nagar, Varanasi.
4. M.D., Pashimanchal Vidyut Vitran Nigam Ltd., Victoria Park, Meerut.
5. M.D., Dakshinanchal Vidyut Vitran Nigam Ltd., Vidyut Bhawan, Gailana Road, Agra.
6. M.D., Kanpur Electric Supply Co. Ltd., KESA House, Kanpur.
7. Chief Executive Officer, Noida Power Company Ltd., Commercial Complex, H-Block, Alpha-II Sector, Greater Noida.
8. Chief Engineer (PPA), UPPCL, 14th Floor Shakti Bhawan Ext, Lucknow.

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.
5. Executive Director (Finance), UPRVUNL, 8th floor, Shakti Bhawan Ext, Lucknow.

(Ramesh Chandra)
Chief Engineer(Commercial)

**HARDUAGANJ EXTENSION STAGE II 1x660 MW
THERMAL POWER STATION**

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



UP RAJYA VIDYUT UTPADAN NIGAM LTD.

Chamla
AE

Shivendra
M. Shyam

22/0

मुख्य अभियंता (वित्तिक)
उत्पन्न विद्युत निगम लि.
14वां मं, शक्ति भवन विस्तार
लखनऊ-226001

INDEX

S No	Particulars	Page No
1	Form 1	2
2	Form 2 & Affidavit	3
	Harduaganj Extension Stage II 1x660 MW MW Thermal Power Station	5
1.1	Gross Fixed Assets	7
1.2	Means of Finance	8
1.3	Interest on Loan	9
1.4	Depreciation	11
1.5	Return on Equity	12
1.6	O&M Expenses	12
1.7	Interest on Working Capital	13
1.8	Summary of Annual Fixed Charges	14
2	Energy Charges	15
2.1	Fuel Cost Adjustment	17
3	Prayer	18

List of Annexures

Annexure No	Particulars	Page No
Annexure-A	Tariff Filing Formats	
Annexure-1	UPRVUNL Audited Balance Sheet for FY 2019-20	
Annexure-2	UPRVUNL Audited Balance Sheet for FY 2020-21	
Annexure-3	UPRVUNL Provisional Balance Sheet for FY 2021-22	
Annexure-4	Harduaganj Extension Stage-II revised cost approvals	
Annexure-4A	Detailed Project Report of Harduaganj Extension Stage II	
Annexure-5	Statutory Auditor Certificate for Harduaganj Extension Stage-II upto COD	
Annexure-6	Guarantee Parameters Declaration for Harduaganj Extension Stage-II	
Annexure-7	Coal and Oil Forms for the Period July to September 2022	

(Signature)

(Signature)

(Signature)

(Signature)
 14th Jan, 2023

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 HARDUAGANJ EXTENSION STAGE II 1X660 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

DAKSHINACHAL VIDYUT VITRAN NIGAM LTD.
GALINA ROAD AGRA.

KANPUR ELECTRICITY SUPPLY CO. LTD.
KESA HOUSE, KANPUR

RESPONDENTS

पुस्तक संख्या: 10/10
दिनांक: 10/10/2019
लुधियाना-201001

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 HARDUAGANJ EXTENSION STAGE II 1X660 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

DAKSHINACHAL VIDYUT VITRAN NIGAM LTD.
GALINA ROAD AGRA.

KANPUR ELECTRICITY SUPPLY CO. LTD.
KESA HOUSE, KANPUR

RESPONDENTS

(Signature)

(Signature)

(Signature)

(Signature)

उत्तर प्रदेश विद्युत नियंत्रण आयोग
लखनऊ
14वीं फ्लोर, गौतम बुद्ध मार्ग, लखनऊ
संलग्न-2/2019/01

1. HARDUAGANJ EXTENSION STAGE II 1X6600 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, this section presents the ARR and MYT Petition for FY 2019-20 to FY 2023-24 in respect of **Harduaganj Extension Stage II 1x660 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.**

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. 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 at Rs 4826.5 Crores. In light of the MOEF&CC notification S.O. 3305(E) dated 7th December 2015, additional expenditure towards installation of SCR and FGD systems was necessitated. This additional expenditure 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 revised estimate cost approvals are attached herewith and marked as **Annexure-4.**

The detailed project report towards the aforementioned project was prepared by M/s NTPC, the same is annexed with the Petition and Marked as **Annexure-4A.**

The cost estimate of the Thermal Power Station is given in table below:

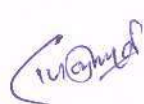


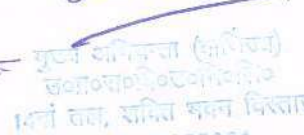
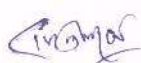





Table: Abstract of Cost Estimate of Harduaganj Extension Stage II TPS

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

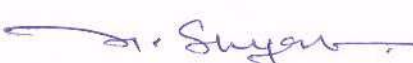
The total expenditure incurred upto COD i.e as on 8th February 2022 is to the tune of Rs. 5,771.94 crore and the statutory auditor certificate in this regard is attached herewith and marked as **Annexure-5**. The unit of this power station has already been commissioned on 9th February 2022.

Based on provisional expenditure till 8th February 2022, the Annual Revenue Requirement for determination of Provisional Tariff is detailed in the upcoming sections. It is submitted, that the data towards the forms have been determined based on provisional expenditure levels till 8th February 2022 (and till FY 2023-24 considering revised cost of Rs. 6011.83 Crores only on an indicative basis) and the allowable ARR of the station would be finalized after determination of final Project cost.



Harduaganj Extn. Stage II TPS- MYT Petition for the control period FY 2019-20 to FY 2023-24







मुख्य अधिकारी (संविदा)
उपप्रबंधन विभाग
14वां तल. इंदिरा भवन विस्तार
नएला-226001

Based on the above submission, the following sections detail the Provisional Tariff Petition of Harduaganj Extension Stage II TPS.

2.1 Gross Fixed Assets

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.

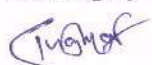
(3) The generating company shall make a fresh Application as per Appendix II to these Regulations, for determination of Final tariff based on actual Capital Expenditure incurred up to the date of commercial operation of the generating station, duly audited and certified by the Statutory Auditors.

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.

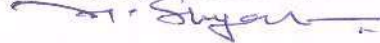
(4) Where application for determination of tariff of a new project has been filed before the Commission in accordance with clause 15(2) of these Regulations, the Commission may consider to grant provisional tariff up to 90% of the Annual Fixed Cost of the project claimed in the Application subject to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

Accordingly, the Petitioner, for the purpose of the instant petition, has considered the opening GFA balance as on 08.02.2022 based on the provisional accounts upto COD. The petitioner reiterates that Harduaganj Extn. Stage II TPS- MYT Petition for the control period FY 2019-20 to FY 2023-24







3230
30.02.2022
14th Feb, 2022
226001

the current submission is based on provisional expenses only and additional capitalization during the control period would be carried out as per the DPR (the computation in the data forms for FY 2022-23 and FY 2023-24 considering revised cost of Rs. 6011.83 Crores is only on an indicative basis)

In the instant Petition, the Petitioner is submitting the detailed asset wise list of its fixed assets as on 08.02.2022. The Petitioner prays leave, that the additional capitalization may be allowed in accordance to the approved project cost during final tariff determination.

Accordingly, the following table depicts the proposed Gross Fixed Asset balances along with the yearly capitalizations (if any) for the Control period FY 2021-22 to FY 2023-24:

Table: - Gross Fixed Assets Summary - FY 2021-22 to FY 2023-24

(All figures in RsCrores)

Particulars	2021-22	2022-23	2023-24
Opening GFA	5,771.94	5,771.94	5,939.86
Capitalisation	-	167.92	71.97
Deletions	-	-	-
Closing GFA	5,771.94	5,939.86	6,011.83

(Note: the computation for FY 2022-23 and FY 2023-24 considering revised cost of Rs. 6011.83 Crores is only on an indicative basis)

2.2 Means of Finance

Regulation 22 of the UPERC Generation Regulations, 2019 provide the Debt-Equity ratio normative approach of financing of the capital expenditure in the ratio of 70% debt and 30% equity. 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. 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

MoF	2021-22	2022-23	23023-24
Opening GFA	5,771.94	5,771.94	5,939.86
Additions	-	167.92	71.97
Deletions	-	-	-
Closing GFA	5,771.94	5,939.86	6,011.83
Closing Net FA	5,469.81	5,331.19	5,090.35
Financing:			
Opening Equity	1,731.58	1,731.58	1,781.96
Additions	-	50.38	21.59

MoF	2021-22	2022-23	23023-24
Closing Equity	1,731.58	1,781.96	1,803.55
Open. Accumulated Depreciation	-	302.14	608.67
Depreciation during the year	302.14	306.53	312.81
Closing Accumulated Depreciation	302.14	608.67	921.48
Opening Debts	4,040.36	3,738.22	3,549.24
Additions	-	117.54	50.38
Less: Depreciation (normative repayment)	302.14	306.53	312.81
Closing Debts	3,738.22	3,549.24	3,286.80

(Note: the computation for FY 2022-23 and FY 2023-24 considering revised cost of Rs. 6011.83 Crores is only on an indicative basis)

2.3 Interest on Loan Capital

Regulation 24 (ii) of the UPERC Generation Regulations, 2019 provide the basis for computation of Interest on loan capital. It 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 29th April 2016. 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 11.88%, the interest on loan capital has been worked out in the table below:

Table: Weighted Average Interest Rate FY 2018-19

(All figures in Rs Crs)

Loan from	Disburse Amount	Disburse Date	Rate of Interest
PFC	22.44	11-APR-2018	11.65%
PFC	14.08	16-APR-2018	11.65%
PFC	35.96	19-APR-2018	11.65%
PFC	12.36	23-APR-2018	11.65%
PFC	31.90	04-MAY-2018	11.65%
PFC	46.48	10-MAY-2018	11.65%
PFC	0.96	17-MAY-2018	11.65%
PFC	1.40	18-MAY-2018	11.65%
PFC	9.40	22-MAY-2018	11.65%
PFC	37.64	23-MAY-2018	11.65%

(Handwritten signature)
मुख्य कार्यकारी अधिकारी
उपरोक्त विवरण के अनुसार
14वां तल, सचिवालय बिल्डिंग
नया दिल्ली-226004

(Handwritten signature)

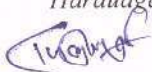
(Handwritten signature)

(Handwritten signature)

Loan from	Disburse Amount	Disburse Date	Rate of Interest
PFC	41.00	04-JUN-2018	11.65%
PFC	2.25	29-JUN-2018	11.90%
PFC	16.96	10-JUL-2018	11.90%
PFC	21.93	16-JUL-2018	11.90%
PFC	17.16	24-JUL-2018	11.90%
PFC	57.25	28-SEP-2018	11.90%
PFC	1.06	11-OCT-2018	11.90%
PFC	25.66	15-OCT-2018	11.90%
PFC	5.88	18-OCT-2018	11.90%
PFC	16.40	30-OCT-2018	11.90%
PFC	38.13	06-NOV-2018	11.90%
PFC	8.77	20-NOV-2018	11.90%
PFC	13.04	26-NOV-2018	11.90%
PFC	5.43	27-NOV-2018	11.90%
PFC	10.24	29-NOV-2018	11.90%
PFC	20.50	05-DEC-2018	11.90%
PFC	0.25	06-DEC-2018	11.90%
PFC	11.93	10-DEC-2018	11.90%
PFC	1.05	11-DEC-2018	11.90%
PFC	7.27	14-DEC-2018	11.90%
PFC	8.56	18-DEC-2018	11.90%
PFC	19.14	21-DEC-2018	11.90%
PFC	21.82	24-DEC-2018	11.90%
PFC	41.44	28-DEC-2018	11.90%
PFC	29.49	11-JAN-2019	11.90%
PFC	31.24	15-JAN-2019	11.90%
PFC	20.39	18-JAN-2019	11.90%
PFC	18.07	29-JAN-2019	11.90%
PFC	21.75	01-FEB-2019	11.90%
PFC	9.52	04-FEB-2019	11.90%
PFC	12.94	11-FEB-2019	11.90%
PFC	6.85	27-FEB-2019	11.90%
PFC	59.69	27-FEB-2019	11.90%
PFC	11.36	06-MAR-2019	12.15%
PFC	1.03	07-MAR-2019	12.15%
PFC	2.59	08-MAR-2019	12.15%
PFC	2.30	13-MAR-2019	12.15%
PFC	25.11	14-MAR-2019	12.15%
PFC	47.91	15-MAR-2019	12.15%
PFC	46.65	30-MAR-2019	12.15%
	972.67		11.88%
Weighted Average rate			11.88%



मुख्य अभियंता (ग्रामीण)
उत्तराखण्ड विद्युत निगम लि.
14वां तल, बालीय बाग विस्तार
देहरादून-248 001





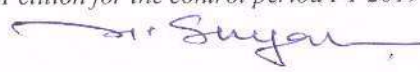


Table: Summary of Interest on Loan for the Control Period*(All figures in RsCrs)*

Particulars	2021-22	2022-23	2023-24
Opening Debts	4,040.36	3,738.22	3,549.24
Additions	-	117.54	50.38
Less: Normative repayment	302.14	306.53	312.81
Closing Debts	3,738.22	3,549.24	3,286.80
Average Debt	3,889.29	3,643.73	3,418.02
Interest on Loan	462.05	432.88	406.06

(Note: the computation for FY 2022-23 and FY 2023-24 considering revised cost of Rs. 6011.83 Crores is only on an indicative basis)

2.4 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.

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:

7250
 14901 14902 14903 14904 14905 14906 14907 14908 14909 14910 14911 14912 14913 14914 14915 14916 14917 14918 14919 14920 14921 14922 14923 14924 14925 14926 14927 14928 14929 14930 14931 14932 14933 14934 14935 14936 14937 14938 14939 14940 14941 14942 14943 14944 14945 14946 14947 14948 14949 14950 14951 14952 14953 14954 14955 14956 14957 14958 14959 14960 14961 14962 14963 14964 14965 14966 14967 14968 14969 14970 14971 14972 14973 14974 14975 14976 14977 14978 14979 14980 14981 14982 14983 14984 14985 14986 14987 14988 14989 14990 14991 14992 14993 14994 14995 14996 14997 14998 14999 15000 15001 15002 15003 15004 15005 15006 15007 15008 15009 15010 15011 15012 15013 15014 15015 15016 15017 15018 15019 15020 15021 15022 15023 15024 15025 15026 15027 15028 15029 15030 15031 15032 15033 15034 15035 15036 15037 15038 15039 15040 15041 15042 15043 15044 15045 15046 15047 15048 15049 15050 15051 15052 15053 15054 15055 15056 15057 15058 15059 15060 15061 15062 15063 15064 15065 15066 15067 15068 15069 15070 15071 15072 15073 15074 15075 15076 15077 15078 15079 15080 15081 15082 15083 15084 15085 15086 15087 15088 15089 15090 15091 15092 15093 15094 15095 15096 15097 15098 15099 15100 15101 15102 15103 15104 15105 15106 15107 15108 15109 15110 15111 15112 15113 15114 15115 15116 15117 15118 15119 15120 15121 15122 15123 15124 15125 15126 15127 15128 15129 15130 15131 15132 15133 15134 15135 15136 15137 15138 15139 15140 15141 15142 15143 15144 15145 15146 15147 15148 15149 15150 15151 15152 15153 15154 15155 15156 15157 15158 15159 15160 15161 15162 15163 15164 15165 15166 15167 15168 15169 15170 15171 15172 15173 15174 15175 15176 15177 15178 15179 15180 15181 15182 15183 15184 15185 15186 15187 15188 15189 15190 15191 15192 15193 15194 15195 15196 15197 15198 15199 15200 15201 15202 15203 15204 15205 15206 15207 15208 15209 15210 15211 15212 15213 15214 15215 15216 15217 15218 15219 15220 15221 15222 15223 15224 15225 15226 15227 15228 15229 15230 15231 15232 15233 15234 15235 15236 15237 15238 15239 15240 15241 15242 15243 15244 15245 15246 15247 15248 15249 15250 15251 15252 15253 15254 15255 15256 15257 15258 15259 15260 15261 15262 15263 15264 15265 15266 15267 15268 15269 15270 15271 15272 15273 15274 15275 15276 15277 15278 15279 15280 15281 15282 15283 15284 15285 15286 15287 15288 15289 15290 15291 15292 15293 15294 15295 15296 15297 15298 15299 15300 15301 15302 15303 15304 15305 15306 15307 15308 15309 15310 15311 15312 15313 15314 15315 15316 15317 15318 15319 15320 15321 15322 15323 15324 15325 15326 15327 15328 15329 15330 15331 15332 15333 15334 15335 15336 15337 15338 15339 15340 15341 15342 15343 15344 15345 15346 15347 15348 15349 15350 15351 15352 15353 15354 15355 15356 15357 15358 15359 15360 15361 15362 15363 15364 15365 15366 15367 15368 15369 15370 15371 15372 15373 15374 15375 15376 15377 15378 15379 15380 15381 15382 15383 15384 15385 15386 15387 15388 15389 15390 15391 15392 15393 15394 15395 15396 15397 15398 15399 15400 15401 15402 15403 15404 15405 15406 15407 15408 15409 15410 15411 15412 15413 15414 15415 15416 15417 15418 15419 15420 15421 15422 15423 15424 15425 15426 15427 15428 15429 15430 15431 15432 15433 15434 15435 15436 15437 15438 15439 15440 15441 15442 15443 15444 15445 15446 15447 15448 15449 15450 15451 15452 15453 15454 15455 15456 15457 15458 15459 15460 15461 15462 15463 15464 15465 15466 15467 15468 15469 15470 15471 15472 15473 15474 15475 15476 15477 15478 15479 15480 15481 15482 15483 15484 15485 15486 15487 15488 15489 15490 15491 15492 15493 15494 15495 15496 15497 15498 15499 15500 15501 15502 15503 15504 15505 15506 15507 15508 15509 15510 15511 15512 15513 15514 15515 15516 15517 15518 15519 15520 15521 15522 15523 15524 15525 15526 15527 15528 15529 15530 15531 15532 15533 15534 15535 15536 15537 15538 15539 15540 15541 15542 15543 15544 15545 15546 15547 15548 15549 15550 15551 15552 15553 15554 15555 15556 15557 15558 15559 15560 15561 15562 15563 15564 15565 15566 15567 15568 15569 15570 15571 15572 15573 15574 15575 15576 15577 15578 15579 15580 15581 15582 15583 15584 15585 15586 15587 15588 15589 15590 15591 15592 15593 15594 15595 15596 15597 15598 15599 15600 15601 15602 15603 15604 15605 15606 15607 15608 15609 15610 15611 15612 15613 15614 15615 15616 15617 15618 15619 15620 15621 15622 15623 15624 15625 15626 15627 15628 15629 15630 15631 15632 15633 15634 15635 15636 15637 15638 15639 15640 15641 15642 15643 15644 15645 15646 15647 15648 15649 15650 15651 15652 15653 15654 15655 15656 15657 15658 15659 15660 15661 15662 15663 15664 15665 15666 15667 15668 15669 15670 15671 15672 15673 15674 15675 15676 15677 15678 15679 15680 15681 15682 15683 15684 15685 15686 15687 15688 15689 15690 15691 15692 15693 15694 15695 15696 15697 15698 15699 15700 15701 15702 15703 15704 15705 15706 15707 15708 15709 15710 15711 15712 15713 15714 15715 15716 15717 15718 15719 15720 15721 15722 15723 15724 15725 15726 15727 15728 15729 15730 15731 15732 15733 15734 15735 15736 15737 15738 15739 15740 15741 15742 15743 15744 15745 15746 15747 15748 15749 15750 15751 15752 15753 15754 15755 15756 15757 15758 15759 15760 15761 15762 15763 15764 15765 15766 15767 15768 15769 15770 15771 15772 15773 15774 15775 15776 15777 15778 15779 15780 15781 15782 15783 15784 15785 15786 15787 15788 15789 15790 15791 15792 15793 15794 15795 15796 15797 15798 15799 15800 15801 15802 15803 15804 15805 15806 15807 15808 15809 15810 15811 15812 15813 15814 15815 15816 15817 15818 15819 15820 15821 15822 15823 15824 15825 15826 15827 15828 15829 15830 15831 15832 15833 15834 15835 15836 15837 15838 15839 15840 15841 15842 15843 15844 15845 15846 15847 15848 15849 15850 15851 15852 15853 15854 15855 15856 15857 15858 15859 15860 15861 15862 15863 15864 15865 15866 15867 15868 15869 15870 15871 15872 15873 15874 15875 15876 15877 15878 15879 15880 15881 15882 15883 15884 15885 15886 15887 15888 15889 15890 15891 15892 15893 15894 15895 15896 15897 15898 15899 15900 15901 15902 15903 15904 15905 15906 15907 15908 15909 15910 15911 15912 15913 15914 15915 15916 15917 15918 15919 15920 15921 15922 15923 15924 15925 15926 15927 15928 15929 15930 15931 15932 15933 15934 15935 15936 15937 15938 15939 15940 15941 15942 15943 15944 15945 15946 15947 15948 15949 15950 15951 15952 15953 15954 15955 15956 15957 15958 15959 15960 15961 15962 15963 15964 15965 15966 15967 15968 15969 15970 15971 15972 15973 15974 15975 15976 15977 15978 15979 15980 15981 15982 15983 15984 15985 15986 15987 15988 15989 15990 15991 15992 15993 15994 15995 15996 15997 15998 15999 16000 16001 16002 16003 16004 16005 16006 16007 16008 16009 16010 16011 16012 16013 16014 16015 16016 16017 16018 16019 16020 16021 16022 16023 16024 16025 16026 16027 16028 16029 16030 16031 16032 16033 16034 16035 16036 16037 16038 16039 16040 16041 16042 16043 16044 16045 16046 16047 16048 16049 16050 16051 16052 16053 16054 16055 16056 16057 16058 16059 16060 16061 16062 16063 16064 16065 16066 16067 16068 16069 16070 16071 16072 16073 16074 16075 16076 16077 16078 16079 16080 16081 16082 16083 16084 16085 16086 16087 16088 16089 16090 16091 16092 16093 16094 16095 16096 16097 16098 16099 16100 16101 16102 16103 16104 16105 16106 16107 16108 16109 16110 16111 16112 16113 16114 16115 16116 16117 16118 16119 16120 16121 16122 16123 16124 16125 16126 16127 16128 16129 16130 16131 16132 16133 16134 16135 16136 16137 16138 16139 16140 16141 16142 16143 16144 16145 16146 16147 16148 16149 16150 16151 16152 16153 16154 16155 16156 16157 16158 16159 16160 16161 16162 16163 16164 16165 16166 16167 16168 16169 16170 16171 16172 16173 16174 16175 16176 16177 16178 16179 16180 16181 16182 16183 16184 16185 16186 16187 16188 16189 16190 16191 16192 16193 16194 16195 16196 16197 16198 16199 16200 16201 16202 16203 16204 16205 16206 16207 16208 16209 16210 16211 16212 16213 16214 16215 16216 16217 16218 16219 16220 16221 16222 16223 16224 16225 16226 16227 16228 16229 16230 16231 16232 16233 16234 16235 16236 16237 16238 16239 16240 16241 16242 16243 16244 16245 16246 16247 16248 16249 16250 16251 16252 16253 16254 16255 16256 16257 16258 16259 16260 16261 16262 16263 16264 16265 16266 16267 16268 16269 16270 16271 16272 16273 16274 16275 16276 16277 16278 16279 16280 16281 16282 16283 16284 16285 16286 16287 16288 16289 16290 16291 16292 16293 16294 16295 16296 16297 16298 16299 16300 16301 16302 16303 16304 16305 16306 16307 16308 16309 16310 16311 16312 16313 16314 16315 16316 16317 16318 16319 16320 16321 16322 16323 16324 16325 16326 16327 16328 16329 16330 16331 16332 16333 16334 16335 16336 16337 16338 16339 16340 16341 16342 16343 16344 16345 16346 16347 16348 16349 16350 16351 16352 16353 16354 16355 16356 16357 16358 16359 16360 16361 16362 16363 16364 16365 16366 16367 16368 16369 16370 16371 16372 16373 16374 16375 16376 16377 16378 16379 16380 16381 16382 16383 16384 16385 16386 16387 16388 16389 16390 16391 16392 16393 16394 16395 16396 16397 16398 16399 16400 16401 16402 16403 16404 16405 16406 16407 16408 16409 16410 16411 16412 16413 16414 16415 16416 16417 16418 16419 16420 16421 16422 16423 16424 16425 16426 16427 16428 16429 16430 16431 16432 16433 16434 16435 16436 16437 16438 16439 16440 16441 16442 16443 16444 16445 16446 16447 16448 16449 16450 16451 16452 16453 16454 16455 16456 16457 16458 16459 16460 16461 16462 16463 16464 16465 16466 16467 16468 16469 16470 16471 16472 16473 16474 16475 16476 16477 16478 16479 16480 16481 16482 16483 16484 16485 16486 16487 16488 16489 16490 16491 16492 16493 16494 16495 16496 16497 16498 16499 16500 16501 16502 16503 16504 16505 16506 16507 16508 16509 16510 16511 16512 16513 16514 16515 16516 16517 16518 16519 16520 16521 16522 16523 16524 16525 16526 16527 16528 16529 16530 16531 16532 16533 16534 16535 16536 16537 16538 16539 16540 16541 16542 16543 16544 16545 16546 16547 16548 16549 16550 16551 16552 16553 16554 16555 16556 16557 16558 16559 16560 16561 16562 16563 16564 16565 16566 16567 16568 16569 16570 16571 16572 16573 16574 16575 16576 16577 16578 16579 16580 16581 16582 16583 16584 16585 16586 16587 16588 16589 16590 16591 16592 16593 16594 16595 16596 16597 16598 16599 16600 16601 16602 16603 16604 16605 16606 16607 16608 16609 16610 16611 16612 16613 16614 16615 16616 16617 16618 16619 16620 16621 16622 16623 16624 16625 16626 16627 16628 16629 16630 16631 16632 16633 16634 16635 16636 16637 16638 16639 16640 16641 16642 16643 16644 16645 16646 16647 16648 16649 16650 16651 16652 16653 16654 16655 16656 16657 16658 16659 16660 16661 16662 16663 16664 16665 16666 16667 16668 16669 16670 16671 16672 16673 16674 16675 16676 16677 16678 16679 16680 16681 16682 16683 16684 16685 16686 16687 16688 16689 16690 16691 16692 16693 16694 16695 16696 16697 16698 16699 16700 16701 16702 16703 16704 16705 16706 16707 16708 16709 16710 16711 16712 16713 16714 16715 16716 16717 16718 16719 16720 16721 16722 16723 16724 16725 16726 16727 16728 16729 16730 16731 16732 16733 16734 16735 16736 16737 16738 16739 16740 16741 16742 16743 16744 16745 16746 16747 16748 16749 16750 16751 16752 16753 16754 16755 16756 16757 16758 16759 16760 16761 16762 16763 16764 16765 16766 16767 16768 16769 16770 16771 16772 16773 16774 16775 16776 16777 16778

Table: Depreciation Summary for the Control Period*(All figures in RsCrS)*

Particulars	2021-22	2022-23	2023-24
Depreciation as per Annexure III of the Regulations	302.14	306.53	312.81
Allowable Depreciation subject to maximum of 90% of the Capital Cost	302.14	306.53	312.81

(Note: the computation for FY 2022-23 and FY 2023-24 considering revised cost of Rs. 6011.83 Crores is only on an indicative basis)

2.5 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 this Regulations @ 15.0% per annum.

The opening Equity base for computation of ROE for the generating station has been considered based on 30% normative funding of the total expenditure incurred till 8th February 2022 through equity.

Accordingly the table below provides the summary of Return on Equity:

Table: Return on Equity for the Control Period (FY 2021-22 to FY 2023-24)*(All figures in RsCrS)*

Particulars	2021-22	2022-23	2023-24
Opening Equity	1,731.58	1,731.58	1,781.96
Additions	-	50.38	21.59
Closing Equity	1,731.58	1,781.96	1,803.55
Rate of Return on Equity (%)	15.0%	15.0%	15.0%
Allowable RoE	259.74	263.52	268.91

(Note: the computation for FY 2022-23 and FY 2023-24 considering revised cost of Rs. 6011.83 Crores is only on an indicative basis)

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%.

However, it is requested to Hon'ble Commission to approve the Capacity Charge with RoE @ 15%.

2.6 Operation & Maintenance Expenses

Regulation 24(iv) of the UPERC Generation Regulations, 2019 deals with the allowance of O&M expenses. For the current generating station, normative parameters for O&M norms have been considered for 600 MW and above sets.

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

(All figures in RsCr/s)

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

Further the Hon'ble Commission in its Para 24(iv) Note (f) and (h) has stated that the expenses on account of water charges and capital spares shall be paid additionally at actuals subject to prudence check. The relevant extract is reproduced below:

"(f) The water charges for thermal generating stations shall be allowed separately. Provided that water charges shall be allowed based on water consumption depending upon type of plant and type of cooling water system, subject to prudence check. The details regarding the same shall be furnished along with the petition;

...

(h) 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 special allowance or claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization."

2.7 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 2021-22 to 2023-24 in which the generating station or a unit thereof is declared under commercial operation, whichever is later.

For the purpose of calculations of IOWC for FY 2021-22, actual cost of coal and oil ending three months (January to March 2022) for Harduaganj Extension has been taken.

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:

Table: Interest on Working Capital for the Control Period

(All figures in RsCrs)

HARDUAGNAJ EXTENSION STAGE II	2021-22	2022-23	2023-24
Cost of Coal	127.60	127.60	127.60
Cost of Main Secondary Fuel Oil	3.82	3.82	3.82
O & M Expenses	11.94	12.36	12.79
Maintenance Spares	28.66	29.66	30.70
Receivables	344.82	342.84	341.62
Total Working Capital	516.84	516.28	516.54
Rate of Interest	10.50%	10.50%	10.50%
Interest on Working Capital	54.27	54.21	54.24

(Note: the computation for FY 2022-23 and FY 2023-24 considering revised cost of Rs. 6011.83 Crores is only on an indicative basis)

2.8 Summary of Annual Capacity (Fixed) Charges

In view of the above submissions, the fixed cost of the Petitioner's Harduaganj Extension Stage-II 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 RsCrs)

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
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

(Note: the computation for FY 2022-23 and FY 2023-24 considering revised cost of Rs. 6011.83 Crores is only on an indicative basis)

32/06
मुख्य अधिकारी (वित्तिय)
राज्य विद्युत निगम
14वां तल, कलकत्ता शान्ति विस्तार
कलकत्ता-700001

The following table highlights the normative parameters which the Hon'ble Commission has prescribed for the control period of FY 2021-22 to FY 2023-24:

Normative Parameters	Unit	2021-22	2022-23	2023-24
Target Availability	%	85%	85%	85%
Target PLF	%	85%	85%	85%
Aux Energy Consumption	%	6.25%	6.25%	6.25%
Gross Heat Rate	Kcal/kWh	2081	2081	2081
Specific Fuel Oil Cons	ml/kWh	0.50	0.50	0.50

Further, it is humbly submitted that Harduaganj Extension Stage-II Power Plant has induced draft cooling towers installed in the plant design. As per Regulation 26 Clause (v) sub-clause (a) the UPERC (Terms and Conditions of Generation Tariff) Regulations, 2019 stipulate

In light of the above, the Petitioner claims the same relaxed norm at 6.25% instead of the normative 5.75% for 500 MW and above series of unit sizes.

$$\text{GSHR} = 1.05 \times \text{Design Heat Rate (Kcal/kWh)}$$

Turbine Cycle Heat Rate = 1764.20 Kcal/kwhr

Efficiency of Steam generator at 100% TMCR (660 MW unit load) = 89.021%

Hence, $GSHR = 1.05 \times 1764.20 \times 1/89.02 \times 100 = 2081$

Harduaganj Extn. Stage II TPS- MYT Petition for the control period FY 2019-20 to FY 2023-24

7280

मुख्य अधिकारी (संविधान)

24 राजस्थान सरकार, जयपुर-360001

15

जयपुर-226001

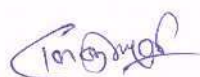
Guarantee Parameters Declaration is attached herewith and marked as **Annexure-6**.

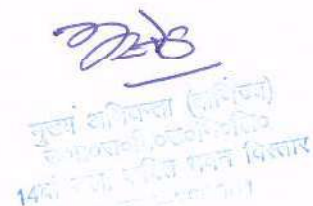
Energy charges for the control period have been projected based on the operating parameters prescribed in the Generation Tariff Regulations. A summarized position of energy charges proposed for the control period is given in Table below: (The details are available in tariff filing formats prescribed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

Table: Calculation of Energy Charges for the Control Period

Description	Unit	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

(Note: the computation for FY 2022-23 and FY 2023-24 is only on an indicative basis)



2.10 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.

(Signature)

(Signature)

(Signature) Shyam

(Signature)
मुख्य कार्यपालक (वित्तिय) /
उपमुख्य कार्यपालक (वित्तिय)
14वां तल, शक्ति भवन बिल्डिंग
लखनऊ-226001

2. 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 Harduaganj Extension Stage II 1x660 MW TPS (Upto COD) for the control period comprising FY 2021-22 to FY 2023-24.
2. The Hon'ble Commission is requested to approve Annual Revenue Requirement for Harduaganj Extension Stage II upto COD for each of the Financial years for the period 2021-22 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.

(Signature)

(Signature)

Shyam

(Signature)
मुख्य अभियंता (वार्डन)
उपग्रह/सिद्धि/सिद्धि
14वां तल, सचिव भवन विस्तार
लखनऊ-226001