

**BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION,
NEW DELHI**

Petition No. ___ /TT/ ___

IN THE MATTER OF: -

Subject matter: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for 125 MVAR Bus Reactor at 400/220 kV Rajgarh Sub-station along with associated Bays at Rajgarh under **Installation of 125 MVAR Bus Reactor at 400 kV Rajgarh Sub-station** under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

Power Grid Corporation of India Ltd.

---PETITIONER

Registered office: B-9, Qutab Institutional Area,
Katwaria Sarai, New Delhi. 110 016.

Corporate Centre: 'SAUDAMINI', Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

**Madhya Pradesh Power Management Company
Ltd.**

---RESPONDENTS

Shakti Bhawan, Rampur

Jabalpur - 482 008

Represented by Its MD

and Others

Place: Gurugram

Petitioner

Date: 09.08.2024


(Zafrul Hasan)
General Manager (Commercial)



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INDEX

Sl. No.	Description	Enclosure No.	Page No.
	Cover Page	-	1
1	Index	-	02-03
2	Letter for registration	-	04-05
3	Memo of Parties	-	06-08
4	Memo of appearance	-	09-10
5	Petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block	-	11-23
6	Supporting affidavit	-	24-25



<u>ANNEXURES:</u>			
7	CERC order dated 22.08.2020 in petition no.490/TT/2019	Encl -1	26-64
8	True up tariff forms for 2019-24 block	Encl -2	65-84
9	Tariff Forms for 2024-29 block along with loan interest proof	Encl -3	85-104
10	Checklist	Encl -4	105

**FILED BY
POWER GRID CORPORATION OF INDIA LTD.**

GURGAON

DATED: 09.08.2024

REPRESENTED BY

**Zafrul Hasan
General Manager (Commercial)**



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Madhya Pradesh Power Management Company Ltd.

Shakti Bhawan, Rampur

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and Others

----- RESPONDENTS

To

The Secretary

Central Electricity Regulatory Commission

New Delhi 110001

Sir,

The present tariff Petition is filed under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central



Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024 and same may be pleased to be registered and taken on record by the Hon'ble Commission.

GURGAON

FILED BY

DATED:09.08.2024

POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

Zafrul Hasan
General Manager (Commercial)



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MEMO OF PARTIES

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Corporate Centre: 'SAUDAMINI', Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

VERSUS

1. **MADHYA PRADESH POWER MANAGEMENT COMPANY LTD.**

SHAKTI BHAWAN, RAMPUR, JABALPUR - 482 008

EMAIL-ANURAG.NAIK@MPPMCL.COM&COMML.DEPTT@MPPMCL.COM



CONTACT NO- 9425805876
REPRESENTED BY ITS MD

2. MADHYA PRADESH AUDYOGIK KENDRA VIKAS NIGAM (INDORE) LTD.

3/54, PRESS COMPLEX, AGRA-BOMBAY ROAD, INDORE-452 008

EMAIL- MPAKVNIND@SATYAM.NET.IN

REPRESENTED BY ITS MD

3. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.

PRAKASHGAD, PLOT NO G-9, A K MARG, BANDRA (EAST), MUMBAI-400 051

EMAIL- CEPPMSEDCL@GMAIL.COM

CONTACT NO- 9833387967

REPRESENTED BY ITS MD

4. GUJARAT URJA VIKAS NIGAM LTD.

SARDAR PATEL VIDYUT BHAWAN, RACE COURSE ROAD, VADODARA - 390 007

EMAIL- DECSP.GUVNL@GEBMAIL.COM

CONTACT NO- 7069009628

REPRESENTED BY ITS MD

5. ELECTRICITY DEPARTMENT

VIDYUT BHAWAN, GOVT. OF GOA, PANAJI, GOA - 403 001

EMAIL- CEE-ELEC.GOA@NIC.IN

CONTACT NO- 7350644000

REPRESENTED BY ITS CHIEF ENGINEER (ELECTRICAL)

6. ELECTRICITY DEPARTMENT

ADMINISTRATION OF DAMAN & DIU, NANI DAMAN, DAMAN - 396 210

EMAIL- EDDAMAN@REDIFFMAIL.COM

CONTACT NO- 9420687290

REPRESENTED BY ITS SECRETARY (FIN.)

7. DNH POWER DISTRIBUTION CORPORATION LIMITED

VIDYUT BHAWAN, 66KV ROAD, NEAR SECRETARIAT, AMLI, SILVASSA - 396 230

EMAIL- CAPARMAR1956@GMAIL.COM

CONTACT NO- 9925211476

REPRESENTED BY ITS SECRETARY (FIN.)



8. **CHHATTISGARH STATE POWER DISTRIBUTION COMPANY LIMITED**
P.O. SUNDER NAGAR, DANGANIA, RAIPUR, CHHATTISGARH-492 013
EMAIL- CECOMCSEB@REDIFFMAIL.COM

CONTACT NO- 982618253

REPRESENTED BY ITS CHAIRMAN

FILED BY

POWER GRID CORPORATION OF INDIA LTD

REPRESENTED BY:

PLACE: Gurugram

DATE: 09.08.2024

Zatrul Hasan
General Manager (Commercial)



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Shakti Bhawan, Rampur

Jabalpur - 482 008

Represented by Its MD

and Others

MEMO OF APPEARANCE

POWER GRID CORPORATION OF INDIA LTD.

-- PETITIONER

1. Shri Dilip Nagesh Rozekar, ED (Commercial & RC), POWERGRID
2. Shri Mohd. Mohsin, Chief GM (Comml- Petition), POWERGRID
3. V. Srinivas, Chief GM (Comml-BCD), POWERGRID
4. V.C. Sekhar, Sr. GM (Commercial-RC), POWERGRID
5. **Shri Zafrul Hasan, GM (Comml- Petition), POWERGRID**



I, Zafrul Hasan, the Petitioner above named do hereby nominate to act, plead and appear on my behalf in the aforesaid matter.

IN WITNESS WHEREOF I have set and subscribed my hands to this writing on this 09th day of August 2024.

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.

GURGAON

DATED: 09.08.2024

Zafrul Hasan
General Manager (Commercial)



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A. Executive Summary of the Petition:

(i) Brief Background of the Petitioner

1. The Petitioner herein, Power Grid Corporation of India Ltd. (Hereinafter referred to as "**POWERGRID/Petitioner**") is a Government Company within the meaning of the Companies Act, 2013. POWERGRID is deemed transmission licensee in terms of Section 14 of the Electricity Act, 2003. POWERGRID by virtue of a transmission licensee is required to inter-alia build, maintain and operate an efficient, coordinated and economical interstate transmission system ("**ISTS**"). POWERGRID operates and functions within the regulatory control of this Hon'ble Central Electricity Regulatory Commission (hereinafter referred to as "**Hon'ble Central Commission**"). Tariff for



the transmission system established by POWERGRID is required to be determined by this Hon'ble Central Commission in accordance with the Tariff Regulations as notified by this Hon'ble Central Commission in exercise of its powers under Section 178 of the Electricity Act, 2003.

(ii) Brief background of the Respondent(s):

POWERGRID has impleaded distribution licensees and Government department of the respective states which are engaged in distribution of electricity in Western Region of India. The respondents are also 'Designated Inter State Transmission Customer' (hereinafter referred to as 'DICS') in terms of the 2020 Sharing Regulations from Western region.

(iii) Background of Transmission Assets:

2. POWERGRID has filed the present petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for the following Assets which are implemented under "**Installation of 125 MVAR Bus Reactor at 400 kV Rajgarh Sub-station** " for the following:

Asset No	Asset Name	DOCO
Asset-I	125 MVAR Bus Reactor at 400/220 kV Rajgarh Sub-station along with associated Bays at Rajgarh	01.06.2012

(iv) Summary of Claims:

3. A. POWERGRID is seeking truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for aforesaid transmission assets on capital cost comprising of capital cost incurred/Admitted upto 31.03.2019/DOCO and additional capital expenditure during 2019-24 & 2024-29 in accordance with terms of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("**Tariff Regulations, 2019**") and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 ("**Tariff Regulations, 2024**").
4. The details of FR/RCE approved cost vis-a cis claimed capital cost as on 31.03.2019 and additional capital expenditure during 2019-24 and 2024-29 tariff block is as under:



Rs in lakhs

Asset No.	Approved Cost as per FR	approved cost as per RCE	Expenditure Up to DOCO /31.03.2019	Expenditure during 2019-24 tariff block	Actual Cost as on 31.03.2024
				2019-24	
Asset	936.52	NA	691.67	No add cap	691.67

Rs in lakhs

Asset No.	Appportioned Approved Cost as per FR	Appportioned approved cost as per RCE	Expenditure Up to 31.03.2024	Estimated expenditure during 2024-29 tariff block	Estimated completion Cost as on 31.03.2029
				2024-29	
Asset	936.52	NA	691.67	No add cap	691.67

5. It is prayed to hon'ble commission to reimburse expenditure of petition filing fee, license fee, newspaper publication expanses and RLDC fee & charges etc.

6. Details of tariff claimed are as under:

True up annual transmission tariff for 2019-24 tariff block:

Rs in Lakhs

Name of the asset	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-1	AFC approved	133.09	130.63	128.52	126.42	124.22
	Revised AFC based on truing up	133.09	130.64	128.34	126.24	122.15

Tariff claimed for 2024-29 tariff block:

Rs in Lakhs

Name of the asset	2024-25	2025-26	2026-27	2027-28	2028-29
Asset-1	144.55	123.90	126.20	129.37	133.45

B. Detailed Petition:

MOST RESPECTFULLY SHOWETH:



Issue wise submission(s):

7. The Petitioner herein, Power Grid Corporation of India Ltd/ POWERGRID. is a Government Company within the meaning of the Companies Act, 1956. POWERGRID is a deemed transmission licensee under Section 14 of the Electricity Act 2003.
8. POWERGRID being transmission licensee is required to inter-alia build, maintain and operate an efficient, coordinated and economical interstate transmission system (ISTS). The tariff for the said transmission systems shall be determined by the Hon'ble Central Commission in accordance with the Tariff Regulations, 2019 and 2024.
9. That the subject project/petition covers approval of transmission tariff for following Asset:

Asset No	Asset Name	DOCO	Remarks
Asset-I	125 MVAR Bus Reactor at 400/220 kV Rajgarh Sub-station along with associated Bays at Rajgarh	01.06.2012	Earlier covered under petition no. 490/TT/2019 now covered under instant petition

10. Cost detail:

The capital cost of Rs. 691.67 Lakhs for subject Asset has been admitted by Hon'ble commission vide order dated 22.08.2020 in petition no. 490/TT/2019. Copy of order is enclosed as **Encl-1**. In the current petition, no additional capital expenditure was incurred during the 2019-24 tariff block, and no additional capital expenditures are proposed during the 2024-29 tariff block.

11. Transmission tariff:

The 2019-2024 truing up exercise is to be done at the time of filing tariff petition for next block, i.e. 2024-29 period as per regulation 13 of Tariff Regulation 2019-24.



Regulation 13 of Tariff Regulation 2019-24:

Quote

“The Commission shall carry out truing up exercise for the period 2019-24 along with the tariff petition filed for the next tariff period, for the following:”

Unquote

That the Petitioner is required to adjust the yearly impact of MAT as per regulation 31 (3) of the tariff Regulation 2019-24 period dated 07.03.2019 in the truing up petition for 2019-24 tariff block.

Regulation 31 (3) of the tariff Regulation 2019-24:

Quote

The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis

Unquote

It is submitted that the Income Tax assessment of the Petitioner has been completed and Assessment Orders has been issued by the Income Tax Department for FY 2019-20 and 2020-21; and that the Income Tax returns have been filed with the Income Tax Department for FY 2021-22 & 2022-23. Further, it is submitted that the Income Tax Return for 2023-24 will be filed in due course.

As such, basis of year wise effective tax rate and Grossed up ROE trued up accordingly for the block period 2019-24 is summarized as under.



Financial Year	Basis considered	Total Tax & Interest paid (Rs)	Assessed MAT Income under Sec 115 JB (Rs)	Effective Tax percentage	Grossed up ROE (Base rate/(1-t))
2019-20	Assessment Order	24,52,62,76,991	1,40,37,47,53,855	17.472%	18.782%
2020-21	Assessment Order	26,08,93,59,008	1,49,32,09,65,036	17.472%	18.782%
2021-22	Actual Tax paid	31,81,46,40,406	1,82,08,92,88,030	17.472%	18.782%
2022-23	Actual Tax paid	30,42,88,20,993	1,74,15,76,29,306	17.472%	18.782%
2023-24	Applicable Rate #		#	17.472%	18.782%

Based on the applicable rate of MAT @ 15 %, Surcharge @ 12% & Cess @ 4%

The above Effective Tax percentage shall be applied by the petitioner in arriving out the Grossed up ROE rate in all cases of truing up petitions to be filed for the period 2019-24. It is submitted that effective rate of tax considered for FY 2019-20 and 2020-21 are based on Assessment Order issued by Income-Tax authorities, for the purpose of grossing up of ROE rate and that the effective rate of tax considered for F/Y 2021-22 and F/Y 2022-23 are based on the Income-tax returns filed, for the purpose of grossing up of ROE rate of respective years. Further, for F/Y 2023-24, pending filing of ITR, effective tax rate is calculated based the applicable MAT rate (i.e. MAT 15% + Surcharge 12.00% + Cess 4%), for the purpose of grossing up of ROE rate.

The Hon'ble Commission is requested to allow the petitioner to claim the differential tariff on account of the trued up ROE based on effective tax rate calculated on completion of Income-tax assessment/re-assessment for the F/Y 2019-20, 2020-21,2021-22,2022-23 and 2023-24 on receipt of the respective assessment orders, directly from the beneficiaries, on year to year basis as provided in the regulation.

In line with the above Regulation, the tariff for each year of the tariff period 2019-24 block has been trued up considering the above Effective Tax percentage to arrive at Grossed up ROE rate.



While filing Tariff petition for 2019-24 period, the petitioner had prayed for allowing the floating rate of Interest on loan adjustments. As per Hon'ble Commission order dated 18.04.2022 in petition no. 26/TT/2021, it has been stated that the weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019 and accordingly, the floating rate of interest on actual, applicable from time to time, if any, during 2019-24 tariff shall be considered at the time of true up or next revision of tariff.

That in the present petition, truing up of transmission tariff for the tariff block 2019-24 is being carried out on account of actual additional capitalization during 2019-24 tariff block, change in MAT rate as well as floating rate of interest during 2019-24.

12. The trued up annual transmission tariff for the tariff period 2019-24 is summarized as below:

Rs in Lakh

Project		2019-20	2020-21	2021-22	2022-23	2023-24
Asset	AFC approved	133.09	130.63	128.52	126.42	124.22
	Revised AFC based on truing up	133.09	130.64	128.34	126.24	122.15

Tariff Filing Formats along with the other relevant information and supporting documentation are attached hereto as **Encl-2**.

That in the subject petition, details are provided in various Tariff Forms with respect to Capital Cost as per books / Gross Block amount as per Books. It is submitted that the petitioner has opted for deemed cost exemption as per Para D7 AA of Ind AS 101 'First-time Adoption of Indian Accounting Standards'. Accordingly Carrying value i.e. Gross Block less Accumulated Depreciation is considered as deemed cost as on the date of transition i.e. 1st April 2015. As such, in case of assets commissioned before 01.04.2015, the accumulated depreciation as on 1st April 2015 is added back to the deemed Capital Cost as per books / Gross Block amount as per Books for arriving at the figures to be provided in various Tariff Forms.

13. The tariff for 2024-29 tariff block is summarized below:



Project		2024-25	2025-26	2026-27	2027-28	2028-29
Asset	AFC	144.55	123.90	126.20	129.37	133.45

Tariff Filing Formats along with the other relevant information and supporting documentation are attached hereto as **Encl-3**.

14. The asset will complete 12 Yrs during the tariff block 2024-29 and thus depreciation till 2024-25 has been calculated based on the straight-line method and at rate specified in Appendix-I as per clause 33 (5) of the CERC Tariff regulations 2019. Further, from FY 2025-26 onwards depreciation has been calculated based on remaining depreciable value to be recovered in the balance useful life. The details have been computed and are provided in Form- 10 A.
15. That, it is submitted that the petitioner is currently liable to pay income tax at MAT rate specified in Income-tax Act,1961. Therefore, ROE has been calculated @ 18.782% after grossing up the ROE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given at regulation 31 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for 2024-29 period. That as per clause 31 (3) of the above regulation, the grossed up rate of ROE at the end of every financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the tariff period 2024-29 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on ROE after truing up shall be recovered or refunded to beneficiaries or the long term customers, as the case may be on year to year basis. It is further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable /adjustable during the tariff period 2024-29 on year to year basis on receipt of Income Tax assessment order.
16. Under CGST Act, 2017 implemented w.e.f. 01.07.2017, the Govt. of India has exempted the charges of transmission of electricity vide notification no. 12/2017 – Central Tax (Rate) dated 28.06.2017 at serial no. 25 under the heading 9969



“Transmission or distribution of electricity by an electric transmission or distribution utility” by giving applicable GST rate as NIL. Hence, the Transmission Charges as indicated at para 12 above is exclusive of GST. Further, if GST is levied at any rate and at any point of time in future on Charges of Transmission of Electricity, the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged & billed separately by the petitioner. Further additional taxes, if any, are to be paid by the petitioner on account of demand from Govt. / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

17. In the tariff calculation for 2019-24 period, Interest on Loan has been calculated on the basis of actual rate of interest of various loans deployed for each year. In the tariff calculation for 2024-29 period, Interest on Loan has been calculated on the basis of interest rates prevailing as on 01.04.2024 for respective loans. The change in Interest rate due to floating rate of interest applicable, if any, for the project needs to be claimed / adjusted over the tariff block of 05 years directly from / with the beneficiaries.

For the purpose of the supporting documents for rate of interest, a compendium of floating rate of interest of various loans during the tariff period 2019-24 shall be submitted later in another truing up petition. Further, interest rate proof documents These documents/details are also available on our website www.powergridindia.in.

18. The transmission charges at para-12 & 13 above is inclusive of O&M expenses derived for the subject asset based on the norms for O&M expenditure for Transmission System as specified under regulation 36 (3) (a) of the tariff regulations for block 2024-29.
19. That as per Regulation 36(3)(d) of CERC Tariff Regulations, 2024, the Security Expenses, Insurance and Capital Spares more than Rs. 10 Lakh for transmission system shall be allowed separately after prudence check.

Security Expenses:

In this regard, it is submitted that a separate petition shall be filed for truing up of security expenses from 01.04.2019 to 31.03.2024 under the Regulation 35 (3) (C) of Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and recovery of security expenses from 01.04.2024 to 31.03.2029 under the



Regulation 36 (3) (d) of Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

Insurance:

In this regard, it is submitted that a separate petition shall be filed before Hon'ble Commission for claiming the overall Insurance Expenses and consequential Interest on Working Capital (IOWC) on the same considering actual Insurance Expense incurred by the Petitioner for the F/Y 2023-24 after escalating the same at 5.25% per annum for arriving at the Estimated Insurance Expense for the year 2024-25, 2025-26, 2026-27, 2027-28 and 2028-29.

Capital Spare:

With regard to Capital Spares, the Petitioner has filed a separate Petition bearing No 45/MP/2024 for claiming the capital spares under Tariff Regulations 2019. Further, as per Tariff Regulations, 2024, Capital spares consumed and consequential Interest on Working Capital (IOWC) on the same shall be claimed by the Petitioner as per actual through a separate petition.

Accordingly, these expenses are not claimed in the subject petition through the relevant Tariff Form and shall be claimed separately.

20. That as per Regulation 99 of CERC Tariff Regulations, 2024, the fees and charges of Central Transmission Utility of India Limited ('CTUIL') shall be allowed separately by the Commission through a separate regulation. Further, it provides that that until such regulation is issued by the Commission, the expenses of CTUIL shall be borne by POWERGRID which shall be recovered by POWERGRID as additional O&M expenses through a separate petition.

Accordingly, the expenses of CTUIL borne by POWERGRID shall be claimed through a separate petition at the end of tariff block.

21. The application filing fee, expenses incurred on publication of Notices in Newspapers and License fee may be allowed to be recovered separately from the respondents in terms of Regulation 94(1) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024. The fees and charges to be paid by the petitioner as ISTS licensee (deemed ISTS licensee) under CERC (Fees and Charges



of RLDC and other matters) Regulations as amended from time to time shall also be recoverable from the DICs as provided under clause 94 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

22. The Transmission Charges and other related Charges indicated at para 12 & 13 above, is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, filing fees, license fee, RLDC fees and charges, capital spares, security expenses, insurance expenses or any other kind of imposition (s) and/ or other surcharges etc. whatsoever imposed / charged by any Government (Central/State) and / or any other local bodies/authorities/regulatory authorities in relation to transmission of electricity, environmental protection, and/or in respect of any of its installation associated with the Transmission System and the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged, billed separately by the petitioner on the respondents.

23. **Sharing of Transmission Charges**

Truing up tariff for Transmission of Electricity (Annual Fixed Cost) for 2019-24 as per para 12 shall be recovered on monthly basis in accordance with Regulation 57 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and shall be shared by the beneficiaries and long-term transmission customers in accordance with the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 & 2020 or as amended from time to time.

Tariff for Transmission of Electricity (Annual Fixed Cost) for 2024-29 as per para 13 above shall be recovered on monthly basis in accordance with Regulation 78 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 and shall be shared by the beneficiaries and long-term transmission customers in accordance with the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 or as amended from time to time

24. In the circumstances mentioned above it will be just and proper that the transmission tariff for the asset covered under this petition be allowed to be charged from the beneficiaries on the basis set out above. **The Petitioner submits that Encl.-1 to Encl.-3 may please be treated as integral part of this petition.**



A. PRAYER

It is respectfully prayed that the Hon'ble Commission may be pleased to

- a) Approve the trued-up Transmission Tariff for 2019-24 block and transmission tariff for 2024-29 block for the assets covered under this petition, as per para 12 and 13 above.
- b) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 and Tariff regulations 2024 as per para 12 and 13 above for respective block.

Further it is submitted that deferred tax liability before 01.04.2009 shall be recoverable from the beneficiaries or long term customers / DIC as the case may be, as and when the same is materialized as per regulation 67 of 2019 and regulation 89 of 2024 tariff regulation. The petitioner may be allow to recover the deferred tax liability materialized directly without making any application before the commission as provided in the regulations.

- c) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 94 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, and other expenditure (if any) in relation to the filing of petition.
- d) Allow the petitioner to bill and recover Licensee fee and RLDC fees & charges, separately from the respondents in terms of Regulation 94 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.
- e) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2024-29 period, if any, from the respondents.



- f) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 19 above.
- g) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall insurance expenses and consequential IOWC on that insurance expenses as mentioned at para 19 above.
- h) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall capital spares at the end of tariff block as per actual as mentioned at Para 19 above.
- i) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition as mentioned at para 20 above.
- j) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice

GURGAON

DATED:09.08.2024

**FILED BY
POWER GRID CORPORATION OF INDIA LTD.**

REPRESENTED BY

Zafrul Hasan
General Manager (COMMERCIAL)



BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION,

NEW DELHI

Petition No. ___/TT/ ___

IN THE MATTER OF: -

Subject matter: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for 125 MVAR Bus Reactor at 400/220 kV Rajgarh Sub-station along with associated Bays at Rajgarh under **Installation of 125 MVAR Bus Reactor at 400 kV Rajgarh Sub-station** under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

Power Grid Corporation of India Ltd.

---PETITIONER

Registered office: B-9, Qutab Institutional Area,
Katwaria Sarai, New Delhi. 110 016.

Corporate Centre: 'SAUDAMINI', Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

**Madhya Pradesh Power Management Company
Ltd.**

---RESPONDENTS

Shakti Bhawan, Rampur

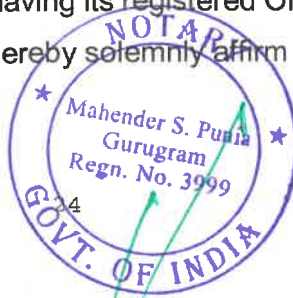
Jabalpur - 482 008

Represented by Its MD

and Others

AFFIDAVIT VERIFYING THE PETITION

I, Zafrul Hasan, S/O Late Sh Zahurul Hasan, working as General Manager (Commercial) in the Powergrid Corporation of India Ltd., having its registered Office at B-9, Institutional Area, Katwaria Sarai, New Delhi-110 016, do hereby solemnly affirm and state as under: -



1. That the deponent is the General Manager of Petitioner and is well conversant with the facts and the circumstances of the case and therefore competent to swear this affidavit.
2. That the accompanying Petition under Section 62 of the Electricity Act, 2003, has been filed by my authorised representative/nominated counsel under my instruction and the contents of the same are true and correct to the best of my knowledge and belief.
3. That the contents of Para 01 to 24 of the facts as mentioned in the Petition are true and correct based on my personal knowledge, belief and records maintained in the office and the contents of Para 01 to 24 of the Petition are believed to be true on the basis of the legal advice received.
4. That the annexures annexed to the Petition are correct and true copies of the respective originals.
5. That the Deponent has not filed any other Petition or Appeal before any other forum or court of law with respect to the subject matter of the dispute



(DEPONENT)

VERIFICATION

Solemnly affirmed at Gurgaon on this 9th day of August' 2024 that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.



(DEPONENT)



ATTESTED

MAHENDER S. PUNIA
ADVOCATE & NOTARY
Distt. Gurugram (Haryana) India

09/08/2024
25



CENTRAL ELECTRICITY REGULATORY COMMISSION**NEW DELHI****Petition No. 490/TT/2019****Coram:****Shri I. S. Jha, Member
Shri Arun Goyal, Member****Date of Order : 22.08.2020****In the Matter of:**

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of transmission assets in Western Region consisting of 125 MVAR Bus Reactor at 400/200 kV Rajgarh Sub-station alongwith associated bays at Rajgarh Sub-station in the Western Region.

And in the Matter of:

Power Grid Corporation of India Ltd.
SAUDAMINI, Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

.....Petitioner**Vs**

1. Madhya Pradesh Power Management Company Ltd.
Shakti Bhawan, Rampur, Jabalpur - 482 008
2. Madhya Pradesh Power Transmission Company Ltd.
Shakti Bhawan, Rampur
Jabalpur - 482 008
3. Madhya Pradesh Audyogik Kendra
Vikas Nigam (Indore) Ltd.
3/54, Press Complex, Agra-Bombay Road, Indore-452 008
4. Maharashtra State Electricity Distribution Company Ltd.
Hongkong bank building, 3rd floor
M.G. Road, Fort, Mumbai -400 001.

ATTESTED TRUE COPY
Page 26-64
Authorised Signatory
Power Grid Corporation of India Ltd.
Plot No. 2, Sector-29, Gurgaon-122001 (HARYANA)



Order in Petition No.490/TT/2019

28



5. Maharashtra State Electricity Transmission Company Ltd.
Prakashganga, 6th Floor, Plot No. C-19, e-block,
Bandra Kurla Complex, Bandra (East)
Mumbai-400 051
6. Gujarat Urja Vikas Nigam Ltd.
Sardar Patel Vidyut Bhawan,
Race Course Road, Vadodara - 390 007
7. Gujarat Energy Transmission Corporation Ltd.
Sardar Patel, Vidyut Bhawan
Race Course Road, Vadodara - 390 007
8. Electricity Department
Govt. of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa – 403 001
9. Electricity Department
Administration of Daman & Diu
Daman- 396210
10. Electricity Department
Administration of Dadra Nagar Haveli
U.T. Silvassa-396230
11. Chhattisgarh State Electricity Board
P.O Sunder Nagar, Dangania, Raipur
Chhattisgarh-492 103.
12. Chhattisgarh State Power Transmission Company Ltd.
Office of the Executive Director (C&P)
State Load Despatch Building
Dangania, Raipur-492 103
13. Chhattisgarh State Power Distribution Company Ltd.
P.O. Sunder Nagar, Dangania, Raipur
Chhattisgarh-492 013

...Respondents

For Petitioner : Shri A.K. Verma, PGCIL
Shri S.S. Raju, PGCIL
Shri B. Dash, PGCIL
Shri Abhay Choudhary, PGCIL

For Respondent : None



ORDER

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as "the Petitioner"), a deemed transmission licensee, for truing up of the tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and for determination of tariff of the 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of 125 MVAR Bus Reactor at 400/220 kV Rajgarh Sub-station alongwith associated Bays at Rajgarh (hereinafter referred as "transmission asset") under installation of 125 MVAR Bus Reactor at 400 kV Rajgarh Sub-station (hereinafter referred to as "transmission project") in Western Region.

2. The Petitioner has made the following prayers in this petition:

"1) Allow the additional capital expenditure for 2014-19 tariff block as claimed as per Para 5.8 above.

2) Approve the trued-up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 7 and 8 above.

3)a) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 10.2 and 11.0 above for respective block.

b)Further it is submitted that deferred tax liability before 01.04.2009 shall be recoverable from the beneficiaries or long-term customers / DIC as the case may be, as and when the same is materialized as per regulation 49 of 2014 and regulation 67 of 2019 tariff regulation. The Petitioner may be allowed to recover the deferred tax liability materialised directly without making any application before the commission as provided in the regulation.

4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of



Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.

5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the beneficiaries in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

6) Allow the Petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.

7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 8.6 above.

8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.

9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice."

Background

3. The brief facts of the case are as under:

a. The Investment Approval and expenditure sanction for the said transmission project was accorded by the Board of Directors of the Petitioner Company vide letter dated 7.7.2010 at an estimated cost of ₹936.52 lakh, which included IDC of ₹56.00 lakh (based on 1st quarter, 2010 price level). The scope of work covered under the instant transmission project broadly includes:

Sub-Station

- i. Extension of 400/220 kV Rajgarh Sub-station
- ii. 420 kV 125 MVAR Bus Reactor

b. The instant transmission project is a single asset project and the instant petition includes the entire scope of the transmission project. The instant transmission asset was put into commercial operation on the scheduled date of



commercial operation of 1.6.2012 and, therefore, there is no time over-run. The transmission tariff was allowed for the instant asset for the 2009-14 period vide order dated 25.6.2014 in Petition No. 94/TT/2012. The transmission tariff allowed for the 2009-14 tariff period was trued up and tariff for the 2014-19 period was determined for the instant transmission asset vide order dated 24.2.2016 in Petition No. 400/TT/2014.

c. The Petitioner has claimed the following trued up tariff for the instant asset for the 2014-19 period:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges (AFC) approved vide order dated 24.2.2016 in Petition no. 400/TT/2014	182.34	193.49	191.46	190.46	189.05
AFC claimed based on truing up in the instant petition	171.79	172.79	176.63	178.52	177.48

4. The Respondents are distribution licensees and power departments, which are procuring transmission service from the Petitioner, mainly beneficiaries of the Western Region.

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No.1, has filed its reply vide affidavit dated 16.1.2020. MPPMCL has raised the issues of grossing up of RoE and CGST during the 2019-24 tariff period. The Petitioner, vide affidavit dated 13.7.2020, has filed rejoinder to the reply of



MPPMCL. The issues raised by MPPMCL and the clarifications given by the Petitioner are considered in the relevant portions of this order.

6. This order is issued considering the submissions made in petition dated 5.9.2019, MPPMCL's reply vide affidavit dated 16.1.2020 and the Petitioner's affidavits dated 4.5.2020 and 13.7.2020

7. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.

Truing up of Annual Fixed Charges for the 2014-19 Tariff Period

8. The details of the trued up transmission charges claimed by the Petitioner in respect of the instant asset for the 2014-19 tariff period are as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	35.42	36.01	37.56	38.52	38.52
Interest on Loan	33.04	30.54	28.89	26.49	23.09
Return on Equity	37.26	38.09	39.81	40.89	41.00
Interest on Working Capital	5.77	5.85	6.00	6.11	6.16
O & M Expenses	60.30	62.30	64.37	66.51	68.71
Total	171.79	172.79	176.63	178.52	177.48

9. The details of the trued up Interest on Working Capital (IWC) claimed by the Petitioner in respect of the instant asset for the 2014-19 tariff period are as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	5.03	5.19	5.36	5.54	5.73
Maintenance Spares	9.05	9.35	9.66	9.98	10.31
Receivables	28.63	28.80	29.44	29.76	29.58
Total Working Capital	42.71	43.34	44.46	45.28	45.62
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	5.77	5.85	6.00	6.11	6.16



Capital Cost as on 1.4.2014

10. The capital cost of the instant asset has been calculated in accordance with the Regulation 9(3) and Regulation 9(6) of the 2014 Tariff Regulations. The Commission vide order dated 24.2.2016 in Petition No. 400/TT/2014 had approved the transmission tariff for the instant asset for the 2014-19 period based on approved capital cost of ₹632.95 lakh as on 31.3.2014 and projected Additional Capital Expenditure of ₹140.85 lakh during 2014-19 as shown under:

Capital Cost as on 1.4.2014	Additional Capital Expenditure	Total cost as on 31.3.2019
	2014-15	
632.95	140.85	773.80

(₹ in lakh)

Initial Spares

11. While determining tariff for the 2009-14 tariff period, the Commission vide order dated 25.6.2014 in Petition No. 94/TT/2012 allowed Initial Spares of ₹13.00 lakh which is within the ceiling limit. The Petitioner vide Auditor Certificate dated 17.7.2019 has submitted and claimed Initial Spares of ₹13.00 lakh which has already been approved by the Commission. Therefore, the Initial Spares as claimed by the Petitioner is allowed.

Additional Capital Expenditure (ACE)

12. The Commission vide order dated 24.2.2016 in Petition No.400/TT/2014 had approved ACE of ₹140.85 lakh during 2014-15 towards balance & retention payments due to undischarged liabilities. Against this, the Petitioner has claimed ACE of ₹22.20 lakh and ₹36.52 lakh during 2015-16 and 2016-17 respectively, towards discharge of liabilities for works executed within the cut-off date for the instant asset under Regulation 14(3)(v) of the 2014 Tariff Regulations. The details of ACE claimed by Petitioner are as under:



Order in Petition No.490/TT/2019



(₹ in lakh)

Period	Additional Capital Expenditure claimed	Regulation
2015-16	22.20	14(3)(v)
2016-17	36.52	
Total ACE claimed in 2014-19 period	58.72	

13. ACE claimed by the Petitioner is beyond the cut-off date of 31.3.2015. The Petitioner has submitted that ACE incurred during the year 2015-16 and 2016-17 is on account of balance and retention payments due to discharge of undischarged liability for works executed within the cut-off date and has claimed the same under Regulation 14(3)(v) of the 2014 Tariff Regulations. The Petitioner has submitted the details of Balance and Retention Payment made after the cut-off date as under:

(₹ in lakh)

Financial Year	Party Name	Amount paid	Remarks
2015-16	Jyoti Structures Limited	22.20	Final retention MRHOC & MICC payment withheld has been released
2016-17	Anukool Steel	11.70	Subvend or liability finalised & released from retention
	Sanvijay Rolling & Engineering	16.15	
	Tarun Steel & Alloys	6.57	
		0.52	TDS
		0.63	WCT
		0.95	BOCW
	TOTAL	36.52	

14. The Petitioner has also submitted Auditor Certificate dated 17.7.2019 in respect of the incurred as given in the above table. Further, ACE claimed in the instant petition is lower than ACE approved vide order dated 24.2.2016 in Petition No. 400/TT/2016. ACE claimed by the Petitioner is approved under Regulation 14(3)(v) of the 2014 Tariff Regulations.

15. The total capital cost as on 31.3.2019 claimed by the Petitioner, including ACE during the 2014-19 period, is ₹691.67 lakh which is within the overall approved



apportioned cost of ₹936.52 lakh. Accordingly, the capital cost considered for the 2014-19 tariff period is as under:

Capital cost as on 1.4.2014	Approved ACE					Total Cost as on 31.3.2019
	2014-15	2015-16	2016-17	2017-18	2018-19	
632.95	0	22.20	36.52	0	0	691.67

Debt-Equity ratio

16. The Petitioner has claimed debt-equity ratio as on 31.3.2014 as approved by the Commission in order dated 25.6.2014 in Petition No. 94/TT/2012. The same has been considered as opening debt-equity ratio as on 1.4.2014 and the details are as under:

Particulars	Amount	
	(₹ in lakh)	(%)
Debt	443.07	70.00
Equity	189.89	30.00
Total	632.95	100.00

17. The debt-equity ratio of 70:30 has been considered for ACE allowed during 2014-19 in accordance with Regulation 19(3) of the 2014 Tariff Regulations.

18. The details of the debt and equity as on 1.4.2014 and 31.3.2019 for the 2014-19 tariff period are as under:

Particulars	Capital cost as on 1.4.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total cost as on 31.3.2019	(%)
	(₹ in lakh)		(₹ in lakh)		(₹ in lakh)	
Debt	443.07	70.00	17.62	70.00	484.17	70.00
Equity	189.89	30.00	41.10	30.00	207.50	30.00
Total	632.95	100.00	58.72	100.00	691.67	100.00



Interest on Loan (IoL)

19. The Petitioner has claimed the weighted average rate of IoL based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on actual interest rate submitted by the Petitioner, in accordance with the Regulation 26 of the 2014 Tariff Regulations. The trued up IoL worked out and allowed in this order is as under:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	443.07	443.07	458.61	484.17	484.17
Cumulative repayments up to Previous Year	55.73	89.15	123.16	158.71	195.23
Net Loan-Opening	387.34	353.92	335.45	325.46	288.94
Additions	0.00	15.54	25.56	0.00	0.00
Repayment during the year	33.42	34.01	35.56	36.52	36.52
Net Loan-Closing	353.92	335.45	325.46	288.94	252.42
Average Loan	370.63	344.68	330.45	307.20	270.68
Weighted Average Rate of Interest on Loan (%)	8.9394	8.9369	8.8780	8.8253	8.8240
Interest on Loan	33.13	30.80	29.34	27.11	23.88

20. IoL approved vide order dated 24.2.2016 in Petition No. 400/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order are shown in the table as under:

(₹ in lakh)					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 24.2.2016 in Petition No. 400/TT/2014	37.52	38.49	34.84	31.19	27.54
Claimed by the Petitioner in the instant petition	33.04	30.54	28.89	26.49	23.09
Allowed after true-up in this order	33.13	30.80	29.34	27.11	23.88

Return on Equity (RoE)

21. The Petitioner is entitled for Return on Equity for the instant asset in terms of Regulation 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that



they are liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 tariff period:

Year	Claimed effective tax rate (in %)	Grossed up ROE (Base Rate/1-t) (in %)
2014-15	21.018	19.625
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

22. MPPMCL has submitted that the Petitioner has grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18 and has not placed on record the Assessment Orders for 2016-17 and 2017-18. For 2018-19, the Petitioner has grossed up RoE and has not claimed the effective tax rate based on actual taxes paid for 2018-19. In response, the Petitioner vide affidavit dated 13.7.2020 has submitted that effective rate of tax considered for 2014-15 and 2015-16 are based on Assessment Orders issued by Income Tax authorities for the purpose of grossing up of RoE rate. The effective rate of tax considered for 2016-17 and 2017-18 are based on the Income-tax returns filed for the purpose of grossing up of RoE rate of the respective years. Further, for 2018-19, effective tax rate is calculated based on the applicable MAT rate (i.e. MAT 18.50% + Surcharge 12.00% + Cess 4%) for the purpose of grossing up of RoE rate. The Petitioner has also submitted a copy of the Assessment Orders of 2014-15 to 2016-17.

23. We have considered the submissions of the Petitioner and MPPMCL. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates for the Petitioner. The relevant portion of the order dated 27.4.2020 is as under: -



Order in Petition No.490/TT/2019

36



“26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term transmission customers/ DICs as the case may be on year to year basis.

27. Accordingly, following effective tax rates based on notified MAT rates are considered for the purpose of grossing up of rate of return on equity:

Year	Notified MAT rates (inclusive of surcharge & cess)	Effective tax (in %)
2014-15	20.961	20.961
2015-16	21.342	21.342
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549

”

24. The same MAT rates as considered in the above order are considered for the purpose of grossing up of rate of RoE for the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations.

Year	Notified MAT rates (inclusive of surcharge & cess) (in %)	Base rate of RoE (in %)	Grossed up ROE (Base Rate/1-t) (in %)
2014-15	20.961	15.50	19.610
2015-16	21.342	15.50	19.705
2016-17	21.342	15.50	19.705
2017-18	21.342	15.50	19.705
2018-19	21.549	15.50	19.758

25. The Petitioner has claimed RoE for the 2014-19 period after grossing up RoE of 15.50% with Effective Tax rates (based on MAT rates) each year as per the above



said Regulation. RoE is trued upon the basis of the MAT rate applicable in the respective years and is allowed as under:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	189.89	189.89	196.55	207.50	207.50
Additions	0.00	6.66	10.96	0.00	0.00
Closing Equity	189.89	196.55	207.50	207.50	207.50
Average Equity	189.89	193.22	202.02	207.50	207.50
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity	37.24	38.07	39.81	40.89	41.00

26. RoE approved vide order dated 24.2.2016 in Petition No. 400/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order are shown in the table below:

(₹ in lakh)					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 24.2.2016 in Petition No. 400/TT/2014	37.14	40.86	40.86	40.86	40.86
Claimed by Petitioner in the instant petition	37.26	38.09	39.81	40.89	41.00
Allowed after true-up in this order	37.24	38.07	39.81	40.89	41.00

Depreciation

27. The Petitioner's claim towards depreciation in the instant petition was found to be higher than the depreciation allowed for the instant asset in order dated 24.2.2016 in Petition No. 400/TT/2014. The Petitioner has neither given any justification for claiming higher depreciation than that was allowed earlier in order dated 24.2.2016 in Petition No. 400/TT/2014 nor made any specific prayer for allowing higher depreciation in this petition. The instant asset was put into commercial operation during the 2009-14 period and the tariff from the date of commercial operation to 31.3.2014 was allowed vide order dated 25.6.2014 in Petition No. 94/TT/2012. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period



was allowed vide order dated 24.2.2016 in Petition No. 400/TT/2014. It is observed that the Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said two petitions where tariff for the instant asset for the 2009-14 period was allowed and tariff of the 2009-14 was trued up and tariff for 2014-19 was allowed even though there was a clear provision in the 2009 and 2014 Tariff Regulations providing depreciation @ 15% for IT Equipment. The Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to "IT Equipment". It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @ of 15% at the time of truing up of the tariff of 2014-19 period. Similar issue had come up in Petition No. 19/TT/2020 wherein the Commission vide order dated 9.5.2020 decided as under:

"31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012 and 9.5.2013 in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014-19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations (the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the substation upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period,



the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations.”

28. In line with the above decision, WAROD has been worked out after taking into account the depreciation rate as prescribed in the 2014 Tariff Regulations and the trued up depreciation allowed for the 2014-19 period is as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	632.95	632.95	655.15	691.67	691.67
Additional Capitalisation	0.00	22.20	36.52	0.00	0.00
Closing Gross Block	632.95	655.15	691.67	691.67	691.67
Average Gross Block	632.95	644.05	673.41	691.67	691.67
Weighted Average Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset	23	22	21	20	19
Elapsed life at the beginning of the year	1	2	3	4	5
Aggregated Depreciable Value	569.66	579.65	606.07	622.50	622.50
Depreciation during the year	33.42	34.01	35.56	36.52	36.52
Aggregate Cumulative Depreciation	89.15	123.16	158.71	195.23	231.75
Remaining Aggregate Depreciable Value	480.51	456.49	447.36	427.27	390.75

29. Depreciation approved vide order dated 24.2.2016 in Petition No. 400/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order are shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 24.2.2016 in Petition No. 400/TT/2014	37.14	40.86	40.86	40.86	40.86
Claimed by the Petitioner in the instant petition	35.42	36.01	37.56	38.52	38.52
Allowed after true-up in this order	33.42	34.01	35.56	36.52	36.52



Operation & Maintenance Expenses (O&M Expenses)

30. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The total O&M Expenses for the instant asset claimed by the Petitioner are as under:

(₹ in lakh)					
O&M Expenses					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-Station Bays					
400 kV					
No. of bays	1	1	1	1	1
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
Total O&M Expense (₹ in lakh)	60.30	62.30	64.37	66.51	68.71

31. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. Norms specified in respect of the elements covered in the instant asset are as under:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses					
400 kV					
No. of bays	4	4	4	4	4
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
Transmission line					
D/C Twin/Triple Conductor	95.88	95.88	95.88	95.88	95.88
Norms (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806

32. We have considered the submission of the Petitioner. The O&M Expenses claimed by the Petitioner are as per the norms specified in the 2014 Tariff Regulations. Therefore, the O&M Expenses claimed by the Petitioner are allowed as under:

O&M Expenses					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-Station Bays					
400KV					
No. of bays	1	1	1	1	1
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
Total O&M Expense (₹ in lakh)	60.30	62.30	64.37	66.51	68.71



33. The O&M Expenses approved vide order dated 24.2.2016 in Petition No. 400/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order are shown in the table below:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 24.2.2016 in Petition No. 400/TT/2014	60.30	62.30	64.37	66.51	68.71
Claimed by the Petitioner in the instant petition	60.30	62.30	64.37	66.51	68.71
Allowed after true-up in this order	60.30	62.30	64.37	66.51	68.71

Interest on Working Capital (IWC)

34. IWC has been worked out as per the methodology provided in the Regulation 28 of the 2014 Tariff Regulations and allowed as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	5.03	5.19	5.36	5.54	5.73
Maintenance Spares	9.05	9.35	9.66	9.98	10.31
Receivables	28.30	28.50	29.17	29.52	29.37
Total Working Capital	42.37	43.04	44.19	45.04	45.41
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on working capital	5.72	5.81	5.97	6.08	6.13

35. IWC approved vide order dated 24.2.2016 in Petition No. 400/TT/2014, claimed by the Petitioner and trued up in the instant order are shown in the table as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 24.2.2016 in Petition No. 400/TT/2014	6.00	6.32	6.35	6.38	6.42
Claimed by the Petitioner in the instant petition	5.77	5.85	6.00	6.11	6.16
Allowed after true-up in this order	5.72	5.81	5.97	6.08	6.13



Approved Annual Fixed Charges for the 2014-19 Tariff Period

36. The trued up Annual Fixed Charges for the instant transmission asset for the tariff period 2014-19 are summarised as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	33.42	34.01	35.56	36.52	36.52
Interest on Loan	33.13	30.80	29.34	27.11	23.88
Return on Equity	37.24	38.07	39.81	40.89	41.00
Interest on Working Capital	5.72	5.81	5.97	6.08	6.13
O & M Expenses	60.30	62.30	64.37	66.51	68.71
Total	169.81	170.99	175.04	177.11	176.24

37. Accordingly, the Annual Transmission Charges approved vide order dated 24.2.2016 in Petition No. 400/TT/2014, as claimed by the Petitioner in the instant petition and approved after truing up in the instant order is as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved earlier vide order dated 24.2.2016 in Petition No. 400/TT/2014	182.34	193.49	191.94	190.46	189.05
Claimed by the Petitioner in the instant petition	171.79	172.79	176.63	178.52	177.48
Allowed after true-up in this order	169.81	170.99	175.04	177.11	176.24

38. The Annual Fixed Charges approved after truing up have decreased in comparison to that approved earlier vide order dated 24.2.2016 in Petition No. 400/TT/2014 mainly due to lower ACE claimed in the instant petition and difference in treatment of depreciation of IT Equipment.

Determination of Annual Fixed Charges for the 2019-24 Tariff Period

39. The Petitioner has claimed the following transmission charges for the instant asset for the 2019-24 tariff period:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	38.52	35.47	35.43	35.43	35.43
Interest on Loan	19.69	16.43	13.41	10.37	7.20
Return on Equity	41.00	41.00	41.00	41.00	41.00



Interest on Working Capital	2.89	2.85	2.86	2.86	2.87
O&M Expenses	32.15	33.28	34.45	35.66	36.91
Total	134.25	129.03	127.15	125.32	123.41

40. The details of IWC claimed by the Petitioner in respect of the instant asset for the 2019-24 period are as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	2.68	2.77	2.87	2.97	3.08
Maintenance Spares	4.82	4.99	5.17	5.35	5.54
Receivables	16.51	15.91	15.68	15.45	15.17
Total Working Capital	24.01	23.67	23.72	23.77	23.79
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	2.89	2.85	2.86	2.86	2.87

Capital Cost

41. Regulation 19 of the 2019 Tariff Regulations provides as follows:

“19. Capital Cost: (1) *The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.*

(2) *The Capital Cost of a new project shall include the following:*

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost*



paid to the railway;

(k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;

(l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;

(m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;

(n) Expenditure on account of change in law and force majeure events; and

(o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

(3) The Capital cost of an existing project shall include the following:

(a) Capital cost admitted by the Commission prior to 1.4.2019 duly tried 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 regulations;

(c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;

(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and

(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

(4) The capital cost in case of existing or new hydro generating station shall also include:

(a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and

(b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.

(5) The following shall be excluded from the capital cost of the existing and new projects:

(a) The assets forming part of the project, but not in use, as declared in the tariff petition;

(b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be de-capitalised only after its redeployment;

Provided further that unless shifting of an asset from one project to another is of



permanent nature, there shall be no de-capitalization of the concerned assets.

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."

42. The Petitioner has claimed capital cost of ₹691.67 lakh as on 31.3.2019 and the same has been approved above in this order. Accordingly, capital cost of ₹691.67 is considered as the opening capital cost as on 1.4.2019 for determination of tariff for the 2019-24 tariff period in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (ACE)

43. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as under:

"24. Additional Capitalisation within the original scope and upto the cut-off date

(1) The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (a) Undischarged liabilities recognized to be payable at a future date;
- (b) Works deferred for execution;
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
- (e) Change in law or compliance of any existing law; and
- (f) Force Majeure events:

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.

(2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution."



44. The Petitioner has not claimed any ACE during 2019-24 tariff period.
45. Accordingly, the capital cost as on 31.3.2024 for the instant asset is considered as under:

			(₹ in lakh)
Capital Cost as on 1.4.2019	ACE		Capital Cost as on 31.3.2024
	2019-24		
691.67	Nil		691.67

Debt-Equity ratio

46. Regulation 18 of the 2019 Tariff Regulations provides as under:

"18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

Explanation-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in



excess of 30% shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.”

47. The details of the debt and equity considered for the purpose of tariff for the 2019-24 tariff period are as under:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	ACE for 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	484.17	70.00	Nil	70.00	484.17	70.00
Equity	207.50	30.00	Nil	30.00	207.50	30.00
Total	691.67	100.00	Nil	100.00	691.67	100.00

Return on Equity (ROE)

48. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations specify as under:

“30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system

Provided further that:

- In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted



Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

- ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;
- iii. in case of a thermal generating station, with effect from 1.4.2020:
 - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
 - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019."

"31. Tax on Return on Equity. (1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where "t" is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

Illustration-

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

$$\text{Rate of return on equity} = 15.50 / (1 - 0.2155) = 19.758\%$$

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:



- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
 (b) Estimated Advance Tax for the year on above is Rs 240 crore;
 (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;
 (d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”

49. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the instant asset is as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	207.50	207.50	207.50	207.50	207.50
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	207.50	207.50	207.50	207.50	207.50
Average Equity	207.50	207.50	207.50	207.50	207.50
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	38.97	38.97	38.97	38.97	38.97

Interest on Loan (“IoL”)

50. Regulation 32 of the 2019 Tariff Regulations provides that:

“32. Interest on loan capital: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.



(3) *The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization 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 de-capitalisation of such asset.*

(4) *Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*

(5) *The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:*

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) *The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*

(7) *The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing."*

51. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the instant asset is subject to true-up and is as under:



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	484.17	484.17	484.17	484.17	484.17
Cumulative Repayments upto Previous Year	231.75	270.27	308.79	347.31	385.83
Net Loan-Opening	252.42	213.90	175.38	136.86	98.33
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	38.52	38.52	38.52	38.52	38.51
Net Loan-Closing	213.90	175.38	136.86	98.33	59.82
Average Loan	233.16	194.64	156.12	117.60	79.08
Weighted Average Rate of Interest on Loan (%)	8.8225	8.8246	8.8995	8.9942	9.0141
Interest on Loan	20.57	17.18	13.89	10.58	7.13

Depreciation

52. Regulation 33 of the 2019 Tariff Regulations provides that:

“33. Depreciation: (1) *Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:*

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) *The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.*

(3) *The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:*

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:



Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

*(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-I** to these regulations for the assets of the generating station and transmission system:*

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services."

53. The IT equipment has been considered as a part of the Gross Block and depreciated using Weighted Average Rate of Depreciation (WAROD) (as placed in Annexure-2). WAROD has been worked out after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100 per cent depreciable. The calculation of WAROD for the 2019-24 period is placed in Annexure-2. The depreciation has been worked out considering the admitted capital expenditure and accumulated depreciation up to 31.3.2019. The depreciation worked out for the instant asset is as under:

(₹ in lakh)



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	691.67	691.67	691.67	691.67	691.67
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	691.67	691.67	691.67	691.67	691.67
Average Gross Block	691.67	691.67	691.67	691.67	691.67
Weighted Average Rate of Depreciation (WAROD) (%)	5.57%	5.57%	5.57%	5.57%	5.57%
Balance useful life of the asset	18	17	16	15	14
Elapsed life at the beginning of the year	6	7	8	9	10
Aggregate Depreciable value	624.56	624.56	624.56	624.56	624.56
Depreciation during the year	38.52	38.52	38.52	38.52	38.52
Cumulative Depreciation upto Previous Year	231.75	270.27	308.79	347.31	385.83
Aggregate Cumulative Depreciation	270.27	308.79	347.31	385.83	424.35
Remaining Depreciable Value	354.29	315.77	277.25	238.73	200.21

Operation & Maintenance Expenses (O&M Expenses)

54. The O&M expenses claimed by the Petitioner for the instant asset for the 2019-24 period are as under:

O&M Expenses	2019-20	2020-21	2021-22	2022-23	2023-24
400 kV Sub-Station (Conventional)					
Normative Rate of O&M as per Regulation	32.15	33.28	34.45	35.66	36.91
No. of Units	1.00	1.00	1.00	1.00	1.00
Total O&M expenses (₹ in lakh)	32.15	33.28	34.45	35.66	36.91

55. Regulations 35(3) and (4) of the 2019 Tariff Regulations provide that:

“35. Operation and Maintenance Expenses:

(3) **Transmission system:** (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (Rs Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (Rs Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282



132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (Rs Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (Rs. Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh)(3000 MW)	2,563	2,653	2,746	2,842	2,942

Provided that the O&M expenses for the GIS bays shall be allowed as worked out by multiplying 0.70 of the O&M expenses of the normative O&M expenses for bays;

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2500 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;



- v. the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

(b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.

(4) **Communication system:** The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”

56. We have considered the submission of the Petitioner. The O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations and are as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses					
400 kV Conventional					
No. of bays	1	1	1	1	1
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
Total O&M expense (₹ in lakh)	32.15	33.28	34.45	35.66	36.91



Interest on Working Capital (IWC)

57. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations specify as follows:

“34. Interest on Working Capital: (1) The working capital shall cover:

(a) For Coal-based/lignite-fired thermal generating stations:

- (i) Cost of coal or lignite and limestone towards stock, if applicable, 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/lignite stock storage capacity whichever is lower;
- (ii) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;
- (iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;
- (iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;
- (v) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and
- (vi) Operation and maintenance expenses, including water charges and security expenses, for one month.

(b) For Open-cycle Gas Turbine/Combined Cycle thermal generating stations:

- (i) Fuel cost for 30 days corresponding to the normative annual plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;
- (ii) Liquid fuel stock for 15 days corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;
- (iii) Maintenance spares @ 30% of operation and maintenance expenses including water charges and security expenses;
- (iv) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel; and
- (v) Operation and maintenance expenses, including water charges and security expenses, for one month.

(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:

- (i) Receivables equivalent to 45 days of annual fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
- (iii) Operation and maintenance expenses, including security expenses for one month.

(2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit



and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:

Provided that in case of new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.

(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency."

58. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the Rate of Interest (ROI) on working capital as 12.05%.

59. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. ROI considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas, ROI for 2020-21 onwards has been considered as 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points). The components of the working capital and interest thereon allowed are as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	2.68	2.77	2.87	2.97	3.08
Maintenance Spares	4.82	4.99	5.17	5.35	5.54
Receivables	16.36	16.11	15.85	15.59	15.27



Total Working Capital	23.86	23.87	23.88	23.91	23.88
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	2.88	2.69	2.69	2.69	2.69

Annual Fixed Charges for the 2019-24 Tariff Period

60. The transmission charges allowed for the instant transmission asset for the 2019-24 period are summarised as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	38.52	38.52	38.52	38.52	38.52
Interest on Loan	20.57	17.18	13.89	10.58	7.13
Return on Equity	38.97	38.97	38.97	38.97	38.97
Interest on Working Capital	2.88	2.69	2.69	2.69	2.69
O & M Expenses	32.15	33.28	34.45	35.66	36.91
Total	133.09	130.63	128.52	126.42	124.22

Filing Fee and the Publication Expenses

61. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

62. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 period. The Petitioner shall also be entitled for recovery of RLDC fee and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for the 2019-24 period.

Security Expenses

63. The Petitioner has submitted that security expenses for the instant asset are not claimed in the instant petition and that it would file a separate petition for claiming



the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 will be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

64. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission assets in one petition. The Commission observes that the Petitioner has already filed the Petition No. 260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

Goods and Services Tax

65. The Petitioner has submitted that if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the respondent(s) to the Petitioner and the same shall be charged & billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Govt. / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.



66. MPPMCL has submitted that the Petitioner's prayer for CGST is premature. In response, the Petitioner in its rejoinder has submitted that under CGST Act, 2017, the transmission or distribution of electricity is exempted from GST. Therefore, transmission charges claimed in the instant petition are exclusive of GST. If GST is levied at any point of time in future on transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

67. We have considered the submissions of the Petitioner. GST is not levied on transmission service at present and hence we are of the view that the Petitioner's prayer is premature.

Capital Spares

68. The Petitioner has sought reimbursement of capital spares at the end of tariff block. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

Sharing of Transmission Charges

69. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.



70. To summarise, the trued-up Annual Fixed Charges allowed for the instant asset for the 2014-19 tariff period are as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	169.81	170.99	175.04	177.11	176.24

71. The Annual Fixed Charges allowed for the instant asset for the 2019-24 tariff period in this order are as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	133.09	130.63	128.52	126.42	124.22

72. This order disposes of Petition No. 490/TT/2019.

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member



DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION FOR THE 2014-19 PERIOD

ANNEXURE-1

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014 / COD (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2015-16	2016-17			2014-15	2015-16	2016-17	2017-18	2018-19
Land - Freehold	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Building Civil Works & Colony	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Sub Station	612.37	22.20	36.52	671.09	5.28%	32.33	32.92	34.47	35.43	35.43
PLCC	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00	0.00	0.00
IT Equipment (Incl. Software)	20.58	0.00	0.00	20.58	5.28%	1.09	1.09	1.09	1.09	1.09
Total	632.95	22.20	36.52	691.67	Total	33.42	34.01	35.56	36.52	36.52
Average Gross Block (₹ in lakh)						632.95	644.05	673.41	691.67	691.67
Weighted Average Rate of Depreciation						5.28%	5.28%	5.28%	5.28%	5.28%



ANNEXURE-2

DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION FOR THE 2019-24 PERIOD

2019-24 Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2019 / COD (₹ in lakh)	Additional Capitalization (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23	2023-24
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Building Civil Works & Colony	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Sub Station	671.09	0.00	0.00	0.00	0.00	0.00	671.09	5.28%	35.43	35.43	35.43	35.43	35.43
PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00	0.00	0.00
IT Equipment (Incl. Software)	20.58	0.00	0.00	0.00	0.00	0.00	20.58	15.00%	3.09	3.09	3.09	3.09	3.09
Total	691.67	0.00	0.00	0.00	0.00	0.00	691.67	Total	38.52	38.52	38.52	38.52	38.52
Average Gross Block (₹ in lakh)									691.67	691.67	691.67	691.67	691.67
Weighted Average Rate of Depreciation									5.57%	5.57%	5.57%	5.57%	5.57%

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Page 26-64

Authorised Signatory

Power Grid Corporation of India Ltd
Plot No. 2, Sector-29, Gurgaon-122001 (Haryana)

Summary of Tariff

Form No. - 1

Name of the Transmission Licensee:	Power Grid Corporation of India Limited		
Project	BUS REACTOR AT RAJGARH S/S		
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh		
Region	Western Region	DOCU Date	Jun 1, 2012

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Year Days	366.00	365.00	365.00	365.00	366.00
Tariff Days	366.00	365.00	365.00	365.00	366.00
Depreciation-Form No. 10A	38.52	38.52	38.52	38.52	36.20
Interest on Loan-Form No. 9E	20.57	17.18	13.89	10.58	7.23
Return on Equity-Form No. 8	38.97	38.97	38.97	38.97	38.97
Int. on Working capital-Form No.11	2.88	2.69	2.51	2.51	2.84
Op. and maintenance-Form No.2	32.15	33.28	34.45	35.66	36.91
Total AFC	133.09	130.64	128.34	126.24	122.15



Details of Transmission Lines and Substations, Communication System covered in the project scope and O&M for instant asset Form No. - 2

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	BUS REACTOR AT RAJGARH S/S		
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh		
Region	Western Region	DOCOC Date	Jun 1, 2012

1. Transmission Lines

(Amount in Rs. Lakh)

Summary:



66

2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transformers/ Reactor/ SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition	
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV		Yes/No	If No, Petition No.
Rajgarh:RAJGARH	Brownfield	400 KV			1.000							Jun 1, 2012	Y	
Rajgarh:	Conventional	400 KV	1.000						125.00			Jun 1, 2012	Y	

Summary:

O&M Expenses For Substations Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
400KV SUB-STATION					
Normative Rate of O&M as per Regulation	32.15	33.28	34.45	35.66	36.91
No. of Units	1.00	1.00	1.00	1.00	1.00
O&M Claimed	32.15	33.28	34.45	35.66	36.91
400KV Sub-station Reactor					
Normative Rate of O&M as per Regulation	0.00	0.00	0.00	0.00	0.00
No. of Units	0.00	0.00	0.00	0.00	0.00
O&M Claimed	0.00	0.00	0.00	0.00	0.00



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Summary of O&M Expenses claim

(Amount in Rs. Lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M					
Transmission Line	0.00	0.00	0.00	0.00	0.00
Substation	32.15	33.28	34.45	35.66	36.91
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	32.15	33.28	34.45	35.66	36.91
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition)					
*Security Expenses	0.00	0.00	0.00	0.00	0.00
*Actual Capital Spare consumed	0.00	0.00	0.00	0.00	0.00
*Insurance Premium Paid	0.00	0.00	0.00	0.00	0.00
Total O&M	32.15	33.28	34.45	35.66	36.91



(Petitioner)




Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	BUS REACTOR AT RAJGARH S/S		
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh		
Region	Western Region	DOC Date	Jun 1, 2012

(Amount in Rs. Lakh)

Particulars	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Base Rate of Return of Equity (in %)						
Tax Rate (in %)	21.55	17.472	17.472	17.472	17.472	17.472
Effective tax rate (in %)						
Grossed up Rate of ROE (in %)	19.758	18.782	18.782	18.782	18.782	18.782
Target availability - AC System (in %)	98.00	98.00	98.00	98.00	98.00	98.00
Target availability - HVDC System (in %)	96.00	96.00	96.00	96.00	96.00	96.00
Norms for sub-station Bays (Rs Lakh per bay)						
765 kV	96.20	45.01	46.60	48.23	49.93	51.68
400 kV	68.71	32.15	33.28	34.45	35.66	36.91
220 kV	48.10	22.51	23.30	24.12	24.96	25.84
132 kV and below	34.36	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (Rs Lakh per MVA)						
765 kV	0.00	0.491	0.508	0.526	0.545	0.564
400 kV	0.00	0.358	0.371	0.384	0.398	0.411
220 kV	0.00	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.00	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (Rs Lakh per km)						
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.806	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.691	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.461	0.503	0.521	0.539	0.558	0.578



Single Circuit (Single Conductor)	0.23	0.252	0.26	0.27	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.21	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.806	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.346	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.123	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.413	1.544	1.598	1.654	1.713	1.773

Norms for HVDC stations

HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	0.00	834.00	864.00	894.00	925.00	958.00
Gazuwaka HVDC Back-to-Back station (Rs. Lakh per 500 MW)	0.00	1,666.00	1,725.00	1,785.00	1,848.00	1,913.00
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	0.00	2,252.00	2,331.00	2,413.00	2,498.00	2,586.00
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	0.00	2,468.00	2,555.00	2,645.00	2,738.00	2,834.00
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	0.00	1,696.00	1,756.00	1,817.00	1,881.00	1,947.00
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	0.00	2,563.00	2,653.00	2,746.00	2,842.00	2,942.00

(Petitioner)



Calculation of ROE

Form No. - 8

Name of the Transmission Licensee		Power Grid Corporation of India Limited			
Project	BUS REACTOR AT RAJGARH S/S				
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh				
Region	Western Region	DOC Date	Jun 1, 2012		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the year	366.00	365.00	365.00	365.00	366.00
No. of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
Opening Normative Equity	207.50	207.50	207.50	207.50	207.50
Less: Adjustment in Equity*	0.00	0.00	0.00	0.00	0.00
Adjustment during the year	0.00	0.00	0.00	0.00	0.00
Net opening equity (Normal)	207.50	207.50	207.50	207.50	207.50
Add: Increase in Equity due to addition during the year / period	0.00	0.00	0.00	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	0.00	0.00	0.00	0.00
Closing Normative Equity	207.50	207.50	207.50	207.50	207.50
Average Normative Equity	207.50	207.50	207.50	207.50	207.50
Rate of return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Reduced rate of 1% decided by commission under Regulation 30(2) (if any)	0.00	0.00	0.00	0.00	0.00
Effective rate of ROE	15.50	15.50	15.50	15.50	15.50
MAT/Corporate Rate	17.472	17.472	17.472	17.472	17.472
Grossed up rate of ROE	18.782	18.782	18.782	18.782	18.782
Return on Equity	38.97	38.97	38.97	38.97	38.97
Pro rata return on Equity	38.97	38.97	38.97	38.97	38.97



Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	BUS REACTOR AT RAJGARH S/S				
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh				
Region	Western Region	DOCO Date	Jun 1, 2012		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
BOND XXXIII -BOND XXXIII					
Gross Loan- Opening	150.00	150.00	150.00	150.00	150.00
Cumulative repayments of Loans upto previous year	62.50	75.00	87.50	100.00	112.50
Net loan-Opening	87.50	75.00	62.50	50.00	37.50
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	12.50	12.50	12.50	12.50	12.50
Net Loan-Closing	75.00	62.50	50.00	37.50	25.00
Average Net Loan	81.25	68.75	56.25	43.75	31.25
Rate of Interest on Loan on Annual Basis	8.64	8.64	8.64	8.64	8.64
Interest on loan	7.02	5.94	4.86	3.78	2.70

BOND XXXVIII -DOC0 DRAWL ON 01-JUN					
Gross Loan- Opening	100.00	100.00	100.00	100.00	100.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	100.00	100.00	100.00	100.00	100.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	100.00	100.00	100.00	100.00	100.00



Average Net Loan	100.00	100.00	100.00	100.00	100.00
Rate of Interest on Loan on Annual Basis	9.25	9.25	9.25	9.25	9.25
Interest on loan	9.25	9.25	9.25	9.25	9.25

BOND XL -ADDCAP FOR 2012-2013

Gross Loan- Opening	66.55	66.55	66.55	66.55	66.55
Cumulative repayments of Loans upto previous year	16.64	22.18	27.73	33.28	38.82
Net loan-Opening	49.91	44.37	38.82	33.27	27.73
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	5.55	5.55	5.55	5.55	5.55
Net Loan-Closing	44.36	38.82	33.27	27.72	22.18
Average Net Loan	47.14	41.60	36.05	30.50	24.96
Rate of Interest on Loan on Annual Basis	9.30	9.30	9.30	9.30	9.30
Interest on loan	4.384	3.8688	3.3527	2.8365	2.3213

BOND XL -DOCO DRAWL

Gross Loan- Opening	84.45	84.45	84.45	84.45	84.45
Cumulative repayments of Loans upto previous year	21.11	28.15	35.19	42.23	49.26
Net loan-Opening	63.34	56.30	49.26	42.22	35.19
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	7.04	7.04	7.04	7.04	7.04
Net Loan-Closing	56.30	49.26	42.22	35.18	28.15
Average Net Loan	59.82	52.78	45.74	38.70	31.67
Rate of Interest on Loan on Annual Basis	9.30	9.30	9.30	9.30	9.30
Interest on loan	5.5633	4.9085	4.2538	3.5991	2.9453



BOND - XLIII -ADDCAP FOR 2012-2013

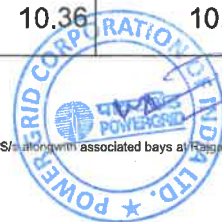
Gross Loan- Opening	11.22	11.22	11.22	11.22	11.22
Cumulative repayments of Loans upto previous year	1.87	2.81	3.74	4.68	5.61
Net loan-Opening	9.35	8.41	7.48	6.54	5.61
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.94	0.94	0.94	0.94	0.94
Net Loan-Closing	8.41	7.47	6.54	5.60	4.67
Average Net Loan	8.88	7.94	7.01	6.07	5.14
Rate of Interest on Loan on Annual Basis	7.93	7.93	7.93	7.93	7.93
Interest on loan	0.7042	0.6296	0.5559	0.4814	0.4076

BOND - XLIII -ADDCAP FOR 2013-2014

Gross Loan- Opening	30.85	30.85	30.85	30.85	30.85
Cumulative repayments of Loans upto previous year	5.14	7.71	10.28	12.85	15.43
Net loan-Opening	25.71	23.14	20.57	18.00	15.42
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	2.57	2.57	2.57	2.57	2.57
Net Loan-Closing	23.14	20.57	18.00	15.43	12.85
Average Net Loan	24.43	21.86	19.29	16.72	14.14
Rate of Interest on Loan on Annual Basis	7.93	7.93	7.93	7.93	7.93
Interest on loan	1.9373	1.7335	1.5297	1.3259	1.1213

BOND- LII -ADDCAP 2015-16

Gross Loan- Opening	15.54	15.54	15.54	15.54	15.54
Cumulative repayments of Loans upto previous year	0.00	0.00	5.18	5.18	5.18
Net loan-Opening	15.54	15.54	10.36	10.36	10.36



Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	5.18	0.00	0.00	0.00
Net Loan-Closing	15.54	10.36	10.36	10.36	10.36
Average Net Loan	15.54	12.95	10.36	10.36	10.36
Rate of Interest on Loan on Annual Basis	8.32	8.32	8.32	8.32	8.32
Interest on loan	1.2929	1.0774	0.862	0.862	0.862

BOND LVII (57) -ADDCAP 2016-17


Gross Loan- Opening	25.56	25.56	25.56	25.56	25.56
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	25.56	25.56
Net loan-Opening	25.56	25.56	25.56	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	25.56	0.00	0.00
Net Loan-Closing	25.56	25.56	0.00	0.00	0.00
Average Net Loan	25.56	25.56	12.78	0.00	0.00
Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	1.8403	1.8403	0.9202	0.00	0.00

Summary

Gross Loan- Opening	484.17	484.17	484.17	484.17	484.17
Cumulative repayments of Loans upto previous year	107.26	135.85	169.62	223.78	252.36
Net loan-Opening	376.91	348.32	314.55	260.39	231.81
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	28.60	33.78	54.16	28.60	28.60
Net Loan-Closing	348.31	314.54	260.39	231.79	203.21



Average Net Loan	362.62	331.44	287.48	246.10	217.52
Rate of Interest on Loan on Annual Basis	8.8225	8.8246	8.8995	8.9943	9.0141
Interest on loan	31.992	29.2481	25.5843	22.1349	19.6075


(Petitioner)



76

Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	BUS REACTOR AT RAJGARH S/S		
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh		
Region	Western Region	DOCO Date	Jun 1, 2012

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the Year	366.00	365.00	365.00	365.00	366.00
No. of days for which Tariff claimed	366.00	365.00	365.00	365.00	366.00
Gross normative loan-Opening	484.17	484.17	484.17	484.17	484.17
Cumulative repayments of Normative loan upto previous year	231.76	270.28	308.80	347.32	385.84
Net normative loan-Opening	252.41	213.89	175.37	136.85	98.33
Addition in normative loan towards the ACE	0.00	0.00	0.00	0.00	0.00
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	38.52	38.52	38.52	38.52	36.20
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	213.89	175.37	136.85	98.33	62.13
Average normative loan	233.15	194.63	156.11	117.59	80.23
Weighted Average Rate of interest on actual loan	8.8225	8.8246	8.8995	8.9943	9.0141
Interest on normative loan	20.57	17.18	13.89	10.58	7.23
Pro rata interest on normative loan	20.57	17.18	13.89	10.58	7.23



77

Calculation of Depreciation Rate on Original Project Cost

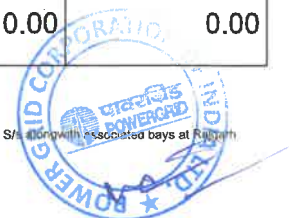
Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	BUS REACTOR AT RAJGARH S/S		
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh		
Region	Western Region	DOC Date	Jun 1, 2012

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2024
2019-20						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	671.09	0.00	671.09	671.09	5.28	35.43
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	6.33	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	20.58	0.00	20.58	20.58	15.00	3.09
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	691.67	0.00	691.67	691.67	0.00	38.52
Weighted Average Rate of Depreciation(%)					5.56913	

2020-21						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00



Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	671.09	0.00	671.09	671.09	5.28	35.43
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	6.33	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	20.58	0.00	20.58	20.58	15.00	3.09
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	691.67	0.00	691.67	691.67	0.00	38.52
Weighted Average Rate of Depreciation(%)					5.56913	

2021-22						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	671.09	0.00	671.09	671.09	5.28	35.43
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	6.33	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	20.58	0.00	20.58	20.58	15.00	3.09
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	691.67	0.00	691.67	691.67	0.00	38.52
Weighted Average Rate of Depreciation(%)					5.56913	



2022-23						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	671.09	0.00	671.09	671.09	5.28	35.43
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	6.33	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	20.58	0.00	20.58	20.58	15.00	3.09
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	691.67	0.00	691.67	691.67	0.00	38.52
Weighted Average Rate of Depreciation(%)					5.56913	

2023-24						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	671.09	0.00	671.09	671.09	5.28	35.43
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	6.33	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	20.58	0.00	20.58	20.58	15.00	0.77
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	691.67	0.00	691.67	691.67	0.00	36.20



Weighted Average Rate of Depreciation(%)					5.23371	
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(Petitioner)

81



Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	BUS REACTOR AT RAJGARH S/S				
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh				
Region	Western Region	DOC Date	Jun 1, 2012		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	366.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/ Project	24.00	24.00	24.00	24.00	24.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	6.00	7.00	8.00	9.00	10.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	18.00	17.00	16.00	15.00	14.00
Capital Base					
1.4 Opening capital cost	691.67	691.67	691.67	691.67	691.67
1.5 Additional Capital Expenditure dr. the year	0.00	0.00	0.00	0.00	0.00
1.6 De-Capitalisation During the year	0.00	0.00	0.00	0.00	0.00
1.7 Closing capital cost	691.67	691.67	691.67	691.67	691.67
1.8 Average capital cost	691.67	691.67	691.67	691.67	691.67
1.9 Freehold land included in 1.8	0.00	0.00	0.00	0.00	0.00
1.10 Asset having NIL salvage value included in 1.8	20.58	20.58	20.58	20.58	20.58
1.11 Asset having 10% salvage value included in 1.8	671.09	671.09	671.09	671.09	671.09
1.12 Depreciable Value(1.10+90% of 1.11)	624.56	624.56	624.56	624.56	624.56
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	5.56913	5.56913	5.56913	5.56913	5.23371



1.14 Depreciation(for the period)	38.52	38.52	38.52	38.52	36.20
1.15 Depreciation(Annualised)	38.52	38.52	38.52	38.52	36.20
1.16 Cumulative depreciation at the beginning of the period	231.76	270.28	308.80	347.32	385.84
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	270.28	308.80	347.32	385.84	422.04
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00

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(Petitioner)



Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	BUS REACTOR AT RAJGARH S/S		
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh		
Region	Western Region	DOCO Date	Jun 1, 2012

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	366.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
O&M Expenses-one month	2.68	2.77	2.87	2.97	3.08
Maintenance spares 15% of O&M Expenses	4.82	4.99	5.17	5.35	5.54
Receivables equivalent to 45 days of AFC	16.36	16.11	15.82	15.56	15.02
Total Working capital	23.86	23.87	23.86	23.88	23.64
Bank Rate as on 01.04.2019 or as on 01st April of the COD year, whichever is later.	12.05	11.25	10.50	10.50	12.00
Interest on working capital	2.88	2.69	2.51	2.51	2.84
Pro rata interest on working capital	2.88	2.69	2.51	2.51	2.84

WA
(Petitioner)



Summary of Tariff

Form No. - 1

Name of the Transmission Licensee:	Power Grid Corporation of India Limited				
Project	BUS REACTOR AT RAJGARH S/S				
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh				
Region	Western Region	DOCOC Date	Jun 1, 2012		

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Year Days	365.00	365.00	365.00	366.00	365.00
Tariff Days	365.00	365.00	365.00	366.00	365.00
Depreciation-Form No. 10A	35.43	13.92	13.92	13.93	13.92
Interest on Loan-Form No. 9E	4.02	1.79	0.58	0.00	0.00
Return on Equity-Form No. 8	38.97	38.97	38.97	38.97	38.97
Int. on Working capital-Form No.11	3.85	3.64	3.77	3.91	4.08
Op. and maintenance-Form No.2	62.28	65.58	68.96	72.56	76.48
Total AFC	144.55	123.90	126.20	129.37	133.45


 (Petitioner)


Details of Transmission Lines and Substations, Communication System covered in the project scope and O&M for instant asset Form No. - 2

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	BUS REACTOR AT RAJGARH S/S		
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh		
Region	Western Region	DOCOC Date	Jun 1, 2012

1. Transmission Lines

(Amount in Rs. Lakh)

Summary:



86

2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transformers/ Reactor/ SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition	
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV		Yes/ No	If No, Petition No.
Rajgarh:RAJGARH	Brownfield	400 KV			1.000							Jun 1, 2012	Y	
Rajgarh:	Conventional	400 KV	1.000						125.00			Jun 1, 2012	Y	

Summary:

O&M Expenses For Substations Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
400KV SUB-STATION					
Normative Rate of O&M as per Regulation	29.53	31.08	32.71	34.43	36.23
No. of Units	1.00	1.00	1.00	1.00	1.00
O&M Claimed	29.53	31.08	32.71	34.43	36.23
400KV Sub-station Reactor					
Normative Rate of O&M as per Regulation	0.262	0.276	0.29	0.305	0.322
No. of Units	1.00	1.00	1.00	1.00	1.00
O&M Claimed	32.75	34.50	36.25	38.13	40.25



88

Summary of O&M Expenses claim

(Amount in Rs. Lakh)

Particular	2024-25	2025-26	2026-27	2027-28	2028-29
A) Normative O&M					
Transmission Line	0.00	0.00	0.00	0.00	0.00
Substation	62.28	65.58	68.96	72.56	76.48
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	62.28	65.58	68.96	72.56	76.48
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition)					
*Security Expenses	0.00	0.00	0.00	0.00	0.00
*Actual Capital Spare consumed	0.00	0.00	0.00	0.00	0.00
*Insurance Premium Paid	0.00	0.00	0.00	0.00	0.00
Total O&M	62.28	65.58	68.96	72.56	76.48



(Petitioner)



Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	BUS REACTOR AT RAJGARH S/S		
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh		
Region	Western Region	DOC Date	Jun 1, 2012

(Amount in Rs. Lakh)

Particulars	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Base Rate of Return of Equity (in %)						
Tax Rate (in %)	17.472	17.472	17.472	17.472	17.472	17.472
Effective tax rate (in %)						
Grossed up Rate for ROE of 15.5% (in %)	18.782	18.782	18.782	18.782	18.782	18.782
Grossed up Rate for ROE of 15.0% (in %)	18.176	18.176	18.176	18.176	18.176	18.176
Target availability - AC System (in %)	98.00	98.00	98.00	98.00	98.00	98.00
Target availability - HVDC System (in %)	96.00	96.00	96.00	96.00	96.00	96.00
Norms for sub-station Bays (Rs Lakh per bay)						
765 kV	51.68	41.34	43.51	45.79	48.20	50.73
400 kV	36.91	29.53	31.08	32.71	34.43	36.23
220 kV	25.84	20.67	21.75	22.90	24.10	25.36
132 kV and below	18.46	15.78	16.61	17.48	18.40	19.35
Norms for Transformers (Rs Lakh per MVA)						
765 kV	0.564	0.262	0.276	0.29	0.305	0.322
400 kV	0.411	0.262	0.276	0.29	0.305	0.322
220 kV	0.282	0.262	0.276	0.29	0.305	0.322
132 kV and below	0.282	0.262	0.276	0.29	0.305	0.322
Norms for Reactor (Rs Lakh per MVAR)						
765 kV	0.00	0.262	0.276	0.29	0.305	0.322
400 kV	0.00	0.262	0.276	0.29	0.305	0.322



220 kV	0.00	0.262	0.276	0.29	0.305	0.322
132 kV and below	0.00	0.262	0.276	0.29	0.305	0.322
Norms for AC and HVDC lines (Rs Lakh per km)						
Single Circuit (Bundled Conductor with six or more sub-conductors)	1.011	0.861	0.906	0.953	1.003	1.056
Single Circuit (Bundled conductor with four sub-conductors)	0.867	0.738	0.776	0.817	0.86	0.905
Single Circuit (Twin & Triple Conductor)	0.578	0.492	0.518	0.545	0.573	0.603
Single Circuit (Single Conductor)	0.289	0.246	0.259	0.272	0.287	0.302
Double Circuit (Bundled conductor with four or more sub-conductors)	1.517	1.291	1.359	1.43	1.506	1.585
Double Circuit (Twin & Triple Conductor)	1.011	0.861	0.906	0.953	1.003	1.056
Double Circuit (Single Conductor)	0.433	0.369	0.388	0.409	0.43	0.453
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.662	2.266	2.385	2.51	2.642	2.781
Multi Circuit (Twin & Triple Conductor)	1.773	1.509	1.588	1.671	1.759	1.851
Norms for HVDC stations (Rs Lakh/MW)						
HVDC bipole scheme (Rs Lakh/MW)	0.00	1.04	1.10	1.16	1.22	1.28
HVDC Back-to-Back stations (Rs Lakh/MW) (Except Gazuwaka BTB)	0.00	2.07	2.18	2.30	2.42	2.55
Gazuwaka HVDC Back-to-Back station (Rs Lakh/MW)	0.00	1.83	1.92	2.03	2.13	2.24

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(Petitioner)



Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	BUS REACTOR AT RAJGARH S/S				
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh				
Region	Western Region	DOC Date	Jun 1, 2012		

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the year	365.00	365.00	365.00	366.00	365.00
No. of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
Opening Normative Equity	207.50	207.50	207.50	207.50	207.50
Less: Adjustment in Equity*	0.00	0.00	0.00	0.00	0.00
Adjustment during the year	0.00	0.00	0.00	0.00	0.00
Net opening equity (Normal)	207.50	207.50	207.50	207.50	207.50
Add: Increase in Equity due to addition during the year / period	0.00	0.00	0.00	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	0.00	0.00	0.00	0.00
Closing Normative Equity	207.50	207.50	207.50	207.50	207.50
Average Normative Equity	207.50	207.50	207.50	207.50	207.50
Rate of return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Reduced rate of 1% decided by commission under Regulation 30(2) (if any)	0.00	0.00	0.00	0.00	0.00
Effective rate of ROE	15.50	15.50	15.50	15.50	15.50
MAT/Corporate Rate	17.472	17.472	17.472	17.472	17.472
Grossed up rate of ROE	18.782	18.782	18.782	18.782	18.782
Pro rata return on Equity	38.97	38.97	38.97	38.97	38.97
Return on Equity	38.97	38.97	38.97	38.97	38.97



Calculation of WAR of interest on actual loan

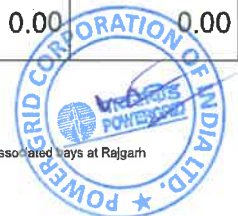
Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	BUS REACTOR AT RAJGARH S/S				
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh				
Region	Western Region	DOC Date	Jun 1, 2012		

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
BOND XXXIII -BOND XXXIII					
Gross Loan- Opening	150.00	150.00	150.00	150.00	150.00
Cumulative repayments of Loans upto previous year	125.00	137.50	150.00	150.00	150.00
Net loan-Opening	25.00	12.50	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	12.50	12.50	0.00	0.00	0.00
Net Loan-Closing	12.50	0.00	0.00	0.00	0.00
Average Net Loan	18.75	6.25	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.64	8.64	8.64	8.64	8.64
Interest on loan	1.62	0.54	0.00	0.00	0.00

BOND XXXVIII -DOCOC DRAWL ON 01-JUN					
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Gross Loan- Opening	100.00	100.00	100.00	100.00	100.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	100.00	100.00
Net loan-Opening	100.00	100.00	100.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	100.00	0.00	0.00
Net Loan-Closing	100.00	100.00	0.00	0.00	0.00



Average Net Loan	100.00	100.00	50.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.25	9.25	9.25	9.25	9.25
Interest on loan	9.25	9.25	4.625	0.00	0.00

BOND XL -ADDCAP FOR 2012-2013

Gross Loan- Opening	66.55	66.55	66.55	66.55	66.55
Cumulative repayments of Loans upto previous year	44.37	49.91	55.46	61.00	66.55
Net loan-Opening	22.18	16.64	11.09	5.55	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	5.55	5.55	5.55	5.55	0.00
Net Loan-Closing	16.63	11.09	5.54	0.00	0.00
Average Net Loan	19.41	13.87	8.32	2.78	0.00
Rate of Interest on Loan on Annual Basis	9.30	9.30	9.30	9.30	9.30
Interest on loan	1.8051	1.2899	0.7738	0.2585	0.00

BOND XL -DOCO DRAWL

Gross Loan- Opening	84.45	84.45	84.45	84.45	84.45
Cumulative repayments of Loans upto previous year	56.30	63.34	70.38	77.41	84.45
Net loan-Opening	28.15	21.11	14.07	7.04	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	7.04	7.04	7.04	7.04	0.00
Net Loan-Closing	21.11	14.07	7.03	0.00	0.00
Average Net Loan	24.63	17.59	10.55	3.52	0.00
Rate of Interest on Loan on Annual Basis	9.30	9.30	9.30	9.30	9.30
Interest on loan	2.2906	1.6359	0.9812	0.3274	0.00



BOND - XLIII -ADDCAP FOR 2012-2013					
Gross Loan- Opening	11.22	11.22	11.22	11.22	11.22
Cumulative repayments of Loans upto previous year	6.55	7.48	8.42	9.35	10.29
Net loan-Opening	4.67	3.74	2.80	1.87	0.93
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.94	0.94	0.94	0.94	0.94
Net Loan-Closing	3.73	2.80	1.86	0.93	-0.01
Average Net Loan	4.20	3.27	2.33	1.40	0.46
Rate of Interest on Loan on Annual Basis	7.93	7.93	7.93	7.93	7.93
Interest on loan	0.3331	0.2593	0.1848	0.111	0.0365

BOND - XLIII -ADDCAP FOR 2013-2014					
Gross Loan- Opening	30.85	30.85	30.85	30.85	30.85
Cumulative repayments of Loans upto previous year	18.00	20.57	23.14	25.71	28.28
Net loan-Opening	12.85	10.28	7.71	5.14	2.57
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	2.57	2.57	2.57	2.57	2.57
Net Loan-Closing	10.28	7.71	5.14	2.57	0.00
Average Net Loan	11.57	9.00	6.43	3.86	1.29
Rate of Interest on Loan on Annual Basis	7.93	7.93	7.93	7.93	7.93
Interest on loan	0.9175	0.7137	0.5099	0.3061	0.1023

BOND- LII -ADDCAP 2015-16					
Gross Loan- Opening	15.54	15.54	15.54	15.54	15.54
Cumulative repayments of Loans upto previous year	5.18	5.18	10.36	10.36	10.36
Net loan-Opening	10.36	10.36	5.18	5.18	5.18



Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	5.18	0.00	0.00	0.00
Net Loan-Closing	10.36	5.18	5.18	5.18	5.18
Average Net Loan	10.36	7.77	5.18	5.18	5.18
Rate of Interest on Loan on Annual Basis	8.32	8.32	8.32	8.32	8.32
Interest on loan	0.862	0.6465	0.431	0.431	0.431

BOND LVII (57) -ADDCAP 2016-17

Gross Loan- Opening	25.56	25.56	25.56	25.56	25.56
Cumulative repayments of Loans upto previous year	25.56	25.56	25.56	25.56	25.56
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	0.00	0.00	0.00	0.00	0.00

Summary

Gross Loan- Opening	484.17	484.17	484.17	484.17	484.17
Cumulative repayments of Loans upto previous year	280.96	309.54	343.32	459.39	475.49
Net loan-Opening	203.21	174.63	140.85	24.78	8.68
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	28.60	33.78	116.10	16.10	3.51
Net Loan-Closing	174.61	140.85	24.75	8.68	5.17



Average Net Loan	188.92	157.75	82.81	16.74	6.93
Rate of Interest on Loan on Annual Basis	9.04	9.0874	9.0638	8.5663	8.2222
Interest on loan	17.0783	14.3353	7.5057	1.434	0.5698

VS

(Petitioner)



Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	BUS REACTOR AT RAJGARH S/S		
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh		
Region	Western Region	DOCO Date	Jun 1, 2012

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the Year	365.00	365.00	365.00	366.00	365.00
No. of days for which Tariff claimed	365.00	365.00	365.00	366.00	365.00
Gross normative loan-Opening	484.17	484.17	484.17	484.17	484.17
Cumulative repayments of Normative loan upto previous year	422.04	457.47	471.39	484.17	484.17
Net normative loan-Opening	62.13	26.70	12.78	0.00	0.00
Addition in normative loan towards the ACE	0.00	0.00	0.00	0.00	0.00
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	35.43	13.92	12.78	0.00	0.00
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	26.70	12.78	0.00	0.00	0.00
Average normative loan	44.42	19.74	6.39	0.00	0.00
Weighted Average Rate of interest on actual loan	9.04	9.0874	9.0638	8.5663	8.2222
Interest on normative loan	4.02	1.79	0.58	0.00	0.00
Pro rata interest on normative loan	4.02	1.79	0.58	0.00	0.00



Calculation of Depreciation Rate on Original Project Cost

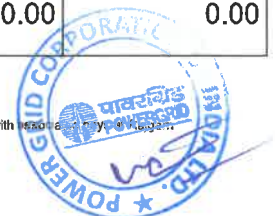
Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	BUS REACTOR AT RAJGARH S/S		
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh		
Region	Western Region	DOC Date	Jun 1, 2012

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2029
2024-25						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	671.09	0.00	671.09	671.09	5.28	35.43
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	20.58	0.00	20.58	20.58	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	691.67	0.00	691.67	691.67	0.00	35.43
Weighted Average Rate of Depreciation(%)					5.122385	

2025-26						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00



Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	671.09	0.00	671.09	671.09	5.28	13.92
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	20.58	0.00	20.58	20.58	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	691.67	0.00	691.67	691.67	0.00	13.92
Weighted Average Rate of Depreciation(%)					2.01252	

2026-27

Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	671.09	0.00	671.09	671.09	5.28	13.92
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	20.58	0.00	20.58	20.58	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	691.67	0.00	691.67	691.67	0.00	13.92
Weighted Average Rate of Depreciation(%)					2.01252	



2027-28						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	671.09	0.00	671.09	671.09	5.28	13.93
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	20.58	0.00	20.58	20.58	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	691.67	0.00	691.67	691.67	0.00	13.93
Weighted Average Rate of Depreciation(%)					2.013966	

2028-29						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	671.09	0.00	671.09	671.09	5.28	13.92
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	20.58	0.00	20.58	20.58	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	691.67	0.00	691.67	691.67	0.00	13.92



Weighted Average Rate of Depreciation(%)					2.01252	
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(Petitioner)



Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	BUS REACTOR AT RAJGARH S/S				
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh				
Region	Western Region	DOC Date	Jun 1, 2012		


(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/Project	24.00	24.00	24.00	24.00	24.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	11.00	12.00	13.00	14.00	15.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	13.00	12.00	11.00	10.00	9.00
Capital Base					
1.4 Opening capital cost	691.67	691.67	691.67	691.67	691.67
1.5 Additional Capital Expenditure dr. the year	0.00	0.00	0.00	0.00	0.00
1.6 De-Capitalisation During the year	0.00	0.00	0.00	0.00	0.00
1.7 Closing capital cost	691.67	691.67	691.67	691.67	691.67
1.8 Average capital cost	691.67	691.67	691.67	691.67	691.67
1.9 Freehold land included in 1.8	0.00	0.00	0.00	0.00	0.00
1.10 Asset having NIL salvage value included in 1.8	20.58	20.58	20.58	20.58	20.58
1.11 Asset having 10% salvage value included in 1.8	671.09	671.09	671.09	671.09	671.09
1.12 Depreciable Value(1.10+90% of 1.11)	624.56	624.56	624.56	624.56	624.56
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	5.122385	2.01252	2.01252	2.013966	2.01252

102



1.14 Depreciation(for the period)	35.43	13.92	13.92	13.93	13.92
1.15 Depreciation(Annualised)	35.43	13.92	13.92	13.93	13.92
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	422.04	457.47	471.39	485.31	499.24
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	457.47	471.39	485.31	499.24	513.16


(Petitioner)



Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	BUS REACTOR AT RAJGARH S/S		
Element Description	125 MVAR Bus Reactor at 400/220 KV Rajgarh S/s alongwith associated bays at Rajgarh		
Region	Western Region	DOCOC Date	Jun 1, 2012

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
O&M Expenses-one month	5.19	5.47	5.75	6.05	6.37
Maintenance spares 15% of O&M Expenses	9.34	9.84	10.34	10.88	11.47
Receivables equivalent to 45 days of AFC	17.82	15.28	15.56	15.90	16.45
Total Working capital	32.35	30.59	31.65	32.83	34.29
Bank Rate as on 01.04.2019 or as on 01st April of the COD year, whichever is later.	11.90	11.90	11.90	11.90	11.90
Interest on working capital	3.85	3.64	3.77	3.91	4.08
Pro rata interest on working capital	3.85	3.64	3.77	3.91	4.08

(Petitioner)



INDEX
Checklist of Forms and other information/ documents for tariff filing for
Transmission System & Communication System

PART-III
Check List

Form No.	Title of Tariff Filing Forms (Transmission & Communication System)	Tick
FORM- 1	Summary of Tariff	✓
FORM- 1A	Summary of Asset level cost	N.A.
FORM-2	Details of Transmission Lines and Substations and Communication System covered in the project scope and O&M for instant asset	✓
FORM-3	Normative parameters considered for tariff computations	✓
FORM- 4	Abstract of existing transmission assets/elements under project, Determination of Effective COD and Weighted Average Life for single AFC for the project as whole.	N.A.
FORM- 4A	Statement of Capital cost	N.A.
FORM- 4B	Statement of Capital Works in Progress	N.A.
FORM- 4C	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New Project/Element	N.A.
FORM-5	Element wise Break-up of Project/ Asset/ Element Cost for Transmission System or Communication System	N.A.
FORM-5A	Break-up of Construction/Supply/Service packages	N.A.
FORM-5B	Details of all the assets covered in the project	N.A.
FORM- 6	Actual Cash Expenditure and Financial Package up to COD	N.A.
FORM- 7	Statement of Additional Capitalisation after COD	N.A.
FORM- 7A	Financing of Additional Capitalisation	N.A.
FORM- 7B	Statement of Additional Capitalisation during five year before the end of the useful life of the project.	N.A.
FORM- 8	Calculation of Return on Equity	✓
FORM-8A	Details of Foreign Equity	N.A.
FORM-9	Details of Allocation of corporate loans to various transmission elements	N.A.
FORM-9A	Details of Project Specific Loans	N.A.
FORM-9B	Details of Foreign loans	N.A.
FORM-9C	Calculation of Weighted Average Rate of Interest on Actual Loans	✓
FORM-9D	Loans in Foreign Currency	N.A.
FORM-9E	Calculation of Interest on Normative Loan	✓
FORM- 10	Calculation of Depreciation Rate on original project cost	✓
FORM- 10A	Statement of Depreciation	✓
FORM- 10B	Statement of De-capitalisation	N.A.
FORM- 11	Calculation of Interest on Working Capital	✓
FORM- 12	Details of time over run	N.A.
FORM- 12A	Incidental Expenditure during Construction	N.A.
FORM- 12B	Calculation of IDC & Financing Charges	N.A.
FORM- 13	Details of Initial spares	N.A.
FORM- 14	Non-Tariff Income	N.A.
FORM- 15	Summary of issue involved in the petition	N.A.
FORM A	Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL	N.A.
Other Information/ Documents		
S. No.	Information/Document	Tick
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC)	N.A.
2	Region wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & Annexure for the new Transmission System & Communication System for the relevant years.	N.A.
3	Copies of relevant loan Agreements	N.A.
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	N.A.
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	N.A.
6	Copies of the BPTA/TSA/PPA with the beneficiaries, if any	N.A.
7	Detailed note giving reasons of cost and time over run, if applicable. List of supporting documents to be submitted: a. Detailed Project Report b. CPM Analysis c. PERT Chart and Bar Chart d. Justification for cost and time Overrun	N.A.
8	Transmission Licensee shall submit copy of Cost Audit Report along with cost accounting records, cost details, statements, schedules etc. for the transmission system as submitted to the Govt. of India for first two years i.e. 2019-20 and 2020-21 at the time of mid-term true-up in 2021- 22 and for balance period of tariff period 2019-24 at the time of final true-up in 2024-25. In case of initial tariff filing the latest available Cost Audit Report should be furnished.	N.A.
9.	BBMB is maintaining the records as per the relevant applicable Acts. Formats specified herein may not be suitable to the available information with BBMB. BBMB may modify formats suitably as per available information to them for submission of required information for tariff purpose.	N.A.
10.	Any other relevant information, (Please specify)	N.A.
<p>Note 1: Electronic copy of the petition (in words format) and detailed calculation as per these formats (in excel format) and any other information submitted has to be uploaded in the e-filing website and shall also be furnished in pen drive/flash drive.</p>		

