

BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. ___/TT/___

IN THE MATTER OF: -

Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for assets under “Split Bus Arrangement and Reconfiguration/Shifting of Terminating Lines at Raipur 400 kV Sub-station” in Western Region 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 Conditions of Tariff) Regulations 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2024.

Power Grid Corporation of India Ltd.

---Petitioner Name

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).

---Respondent Name

Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Rampur, Jabalpur – 482 008
Represented by its Managing Director

And others

Gurgaon

Petitioner

Date: 05/08/24

(Zafrul Hasan)

General Manager (Commercial)



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**Madhya Pradesh Power Management Company
Limited,**

----- RESPONDENTS

Shakti Bhawan, Rampur, Jabalpur – 482 008.

Represented by its Managing Director

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FILED BY
POWER GRID CORPORATION OF INDIA LTD.

GURGAON

DATED: 05/08/24

REPRESENTED BY

[Handwritten Signature]

Zafrul Hasan

General Manager (Commercial)



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----- RESPONDENTS

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Represented by its Managing Director

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 Conditions of Tariff) Regulations 2019 and Central Electricity Regulatory Commission (Terms and Conditions 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:- 05/08/24

POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY



Zafrul Hasan

General Manager (Commercial)



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Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for assets under “**Split Bus Arrangement and Reconfiguration/Shifting of Terminating Lines at Raipur 400 kV Sub-station**” in **Western Region** 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 Conditions of Tariff) Regulations 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2024.

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Madhya Pradesh Power Management Company
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----- RESPONDENTS

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Represented by its Managing Director

MEMO OF PARTIES

Power Grid Corporation of India Ltd.

--- PETITIONER

VERSUS

Western Region

--- RESPONDENTS

1. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Rampur,
Jabalpur – 482 008.

2. Madhya Pradesh Power Transmission Company Limited
Shakti Bhawan, Rampur
Jabalpur- 482008.



3. Madhya Pradesh Industrial Development Corporation,
ATULYA IT PARK, 1st Floor, Near Crystal IT Park,
Khandwa Road, Opp. University,
Indore (MP)-452010.

4. Maharashtra State Electricity Distribution Company Limited,
Hongkong Bank Building, 3rd Floor,
M.G. Road, Fort, Mumbai – 400001.

5. Maharashtra State Electricity Transmission Company Limited
Prakashganga, 6 Floor, Plot No. C-19, E Block
Bandra Kurla Complex, Bandra (East) Mumbai-400051.

6. Gujarat Urja Vikas Nigam Limited,
Sardar Patel Vidyut Bhawan,
Race Course Road, Vadodara – 390007.

7. Electricity Department,
Govt. of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa – 403 001.

8. DNH and DD Power Corporation Ltd.
1st & 2nd floor, Vidyut bhavan,
Silvassa - 396230, DNH, India

9. Chattisgarh State Power Transmission Company Limited
Office of the Executive Director (C & P)
State Load Dispatch Building
Dangania, Raipur- 492013.

10. Chhattisgarh State Power Distribution Company Limited,
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh – 492013.

GURGAON

DATED: 05/08/24

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY



Zafrul Hasan
General Manager (Commercial)



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Madhya Pradesh Power Management Company Limited,

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Represented by its Managing Director

--- RESPONDENT

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.C. Sekhar, Sr. GM (Commercial-RC), POWERGRID
4. **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
05th day of August 2024.

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.

GURGAON

Zafrul Hasan

DATED:- 05.08.24

General Manager (Commercial)



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Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for assets under **“Split Bus Arrangement and Reconfiguration/Shifting of Terminating Lines at Raipur 400 kV Sub-station”** in **Western Region** 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 Conditions of Tariff) Regulations 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2024.

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Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Rampur, Jabalpur – 482 008.
Represented by its Managing Director

--- RESPONDENT

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 inter-state 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 Commission”**). Tariff for the



transmission system established by POWERGRID is required to be determined by this Hon'ble Commission in accordance with the Tariff Regulations as notified by this Hon'ble 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 "Split Bus Arrangement and Reconfiguration/Shifting of Terminating Lines at Raipur 400 kV Sub-station" in Western Region for the following:

Asset No	Asset Name	DOCO	Remarks
Asset	Splitting of 400 kV Raipur Bus through bus sectionaliser into two sections at a point between existing line bays of Chandrapur-1 & Chandrapur-2 and shifting of Chandrapur-2 and Chandrapur-3 line bays from section Raipur-B to Raipur-A	26.06.2014	Approved vide order dated 13.05.2021 in petition no. 09/TT/2020

(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 vis 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	1024.96	-	482.55	No add cap	482.55

Rs in lakhs

Asset No.	Approved Cost as per FR	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	1024.96	-	482.55	No add cap	482.55

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	AFC approved	141.16	141.00	141.19	141.47	141.84
	Revised AFC based on truing up	141.11	140.72	140.65	141.06	142.11

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	125.44	126.16	125.43	110.22	113.63

A. 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, own, operate and maintain an efficient, coordinated and economical inter-state transmission system (ISTS). The tariff for the said transmission systems shall be determined by the Hon'ble 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	Splitting of 400 kV Raipur Bus through bus sectionaliser into two sections at a point between existing line bays of Chandrapur-1 & Chandrapur-2 and shifting of Chandrapur-2 and Chandrapur-3 line bays from section Raipur-B to Raipur-A	26.06.2014	Earlier covered under petition no. 09/TT/2020 now covered under instant petition

10. Cost detail:

The capital cost of Rs. 482.55 Lakhs for subject Asset has been admitted by Hon'ble commission vide order dated 13.05.2021 in petition no. 09/TT/2020. 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
Combined Asset	AFC approved	141.16	141.00	141.19	141.47	141.84
	Revised AFC based on truing up	141.11	140.72	140.65	141.06	142.11

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 Indian Accounting Standards 101 'First-time Adoption of Indian Accounting Standards'. Accordingly Carrying value is



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:

Rs in Lakh

Project		2024-25	2025-26	2026-27	2027-28	2028-29
Asset	AFC	125.44	126.16	125.43	110.22	113.63

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 2026-27 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 2024. Further, for FY 2027-28 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 shortly. These documents/details shall also be made available on our website www.powergrid.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.

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 above 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 Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 or as amended from 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 Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 or as amended from 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.
- 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:-- 05/08/24

FILED BY
POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY



Zafrul Hasan

General Manager (COMMERCIAL)



BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

PETITION NO.:

IN THE MATTER OF:

Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for assets under **"Split Bus Arrangement and Reconfiguration/Shifting of Terminating Lines at Raipur 400 kV Sub-station"** in **Western Region** 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 Conditions of Tariff) Regulations 2019 and Central Electricity Regulatory Commission (Terms and Conditions 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
Limited,

--- RESPONDER

Shakti Bhawan, Rampur, Jabalpur – 482 008.

Represented by its Managing Director

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 the 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

[Handwritten Signature]

(DEPONENT)

VERIFICATION

Solemnly affirmed at Gurgaon on this ^{05th} 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.

[Handwritten Signature]

(DEPONENT)



ATTESTED
MAHENDER S. PUNIA
ADVOCATE & NOTARY
Distt. Gurugram (Haryana) India
24/08/24



पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
केन्द्रीय वाणिज्यिक विभाग


Ref: CC/Commercial/2022

Date:-13.12.2022

LETTER OF AUTHORIZATION

Pursuant to the POWER OF ATTORNEY dated 08.12.2022 and in supersession of the letters of authorization dated 19.07.2022, I hereby authorize the following Executives to sign on Vakalatnama, Affidavits and to appear and conduct case proceedings on behalf of the company before CERC, SERC, APTEL, High Courts and Supreme Court.

1. Sh. S.S Raju, CGM (Commercial)
2. Sh. V. Srinivas, CGM (Commercial - BCD)
3. Sh. Mohd Mohsin, Sr. GM (Commercial)
4. Sh. Bipin Bihari Rath, Sr.GM (Commercial)
5. Sh. V.C Shekhar, GM (Regulatory Cell)
6. Sh. Zafrul Hasan, Sr. DGM (Commercial)


13/12/22

Mukesh Khanna

ED (Commercial &RC)



केन्द्रीय कार्यालय : "सौदामिनी" प्लॉट सं. 2, सेक्टर-29, गुरुग्राम-122001, (हरियाणा), दूरभाष : 0124-2571700-719
Corporate Office : "Saudamini", Plot No. 2, Sector-29, Gurugram-122001, (Haryana) Tel. : 0124-2571700-719

पंजीकृत कार्यालय : बी-9, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016 011-26560112, 26564812, 26564812, 26564892, सीआईएन : L40101DL1989GOI038121
Registered Office : B-9, Qutab Institution Area, Katwaria Sarai, New Delhi-110016. Tel.: 011-26560112, 26564812, 26564812, 26564892, CIN : L40101DL1989GOI038121
Website : www.powergridindia.com

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 9/TT/2020

Coram:

**Shri P.K. Pujari, Chairperson
Shri I.S. Jha, Member
Shri Arun Goyal, Member
Shri Pravas Kumar Singh, Member**

Date of Order: 13.05.2021

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 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of Splitting of 400 kV Raipur Bus through bus sectionaliser into two sections at a point between existing line bays of Chandrapur-1 & Chandrapur-2 and shifting of Chandrapur-2 and Chandrapur-3 line bays from section Raipur-B to Raipur-A under "Split Bus Arrangement and Reconfiguration/Shifting of Terminating Lines at Raipur 400 kV Sub-station" in Western Region.

And in the matter of:

Power Grid Corporation of India Ltd.,
"Saudamini", Plot No. 2,
Sector 29, Gurgaon-122001

...Petitioner

Vs.

1. Madhya Pradesh Power Management Company Ltd.,
Shakti Bhawan, Rampur,
Jabalpur – 482008.
2. Madhya Pradesh Power Transmission Company Ltd.,
Shakti Bhawan, Rampur,
Jabalpur – 482008.
3. Madhya Pradesh Audyogik Kendra,
Vikas Nigam (Indore) Ltd.,
3/54, Press Complex, Agra-Bombay Road,
Indore – 452008.

ATTESTED TRUE COPY
Page No. 26-69
Authorised Signatory
Power Grid Corporation of India Ltd.
Plot No. 2, Sector-29, Gurgaon-122001 (HARYANA)



Order in Petition No. 9/TT/2020



4. Maharashtra State Electricity Distribution Co. Ltd.,
Hongkong Bank Building, 3rd Floor,
M.G. Road, Fort, Mumbai – 400001.
5. Maharashtra State Electricity Transmission Co. Ltd.,
Prakashganga, 6th Floor, Plot No. C-19, E-Block,
Bandra Kurla Complex, Bandra (East),
Mumbai – 400051.
6. Gujarat UrjaVikas Nigam Ltd.,
Sardar Patel Vidyut Bhawan,
Race Course Road,
Vadodara – 390007.
7. Electricity Department,
Government of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel,
Goa – 403001.
8. Electricity Department,
Administration of Daman & Diu,
Daman – 396210.
9. DNH Power Distribution Corporation Ltd.,
Vidyut Bhawan, 66 kV Road, Near Secretariat Amla,
Silvassa – 396230.
10. Chhattisgarh State Power Transmission Co. Ltd.,
Office of The Executive Director (C&P),
State Load Despatch Building,
Dangania, Raipur – 492 013.
11. Chhattisgarh State Power Distribution Co. Ltd.,
P.O.Sunder Nagar, Dangania, Raipur,
Chhattisgarh – 492013.

... Respondent(s)

For Petitioner : Shri S.S. Raju, PGCIL
Shri A.K. Verma, PGCIL
Shri B. Dash, PGCIL
Shri Ved Prakash Rastogi, PGCIL

For Respondents : Shri Anindya Khare, MPPMCL



ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd., a deemed transmission licensee, for truing up of transmission tariff from COD to 31.3.2019 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and determination of tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of Splitting of 400 kV Raipur Bus through bus sectionaliser into two sections at a point between existing line bays of Chandrapur-1 & Chandrapur-2 and shifting of Chandrapur-2 and Chandrapur-3 line bays from section Raipur-B to Raipur-A (hereinafter referred to as 'the transmission asset') under "Split Bus Arrangement and Reconfiguration/Shifting of Terminating Lines at Raipur 400 kV Sub-station" in Western Region (hereinafter referred to as "the transmission project").

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

"1) Allow the add cap for 2014-19 tariff block as claimed as per Para 5 and 7 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 6 and 7 above.

3) 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 Hon'ble Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 6 and 7 above for respective block.

4) Approve the reimbursement of expenditure by the beneficiaries towards petition

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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 7.6 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 beneficiaries, if GST on transmission is levied at any time 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 (IA) and expenditure sanction for the Transmission Project was accorded by the Board of Directors of the Petitioner vide Memorandum No. C/CP/Raipur SS dated 26.8.2010 with an estimated cost of ₹1535 lakh, including an IDC of ₹62 lakh, at 1st Quarter, 2010 price level.

(b) The scope of the transmission project in Western Region is as under:

Transmission Line

(i) Bypassing of Bhatapara-Raipur 400 kV Single Circuit Line to restore the line as Bhatapara-Bhilai 400 kV Single Circuit Line – 1.5 Km.



(ii) Shifting of Chandrapur-2 and Chandrapur-3 line bays from section Raipur-B to Raipur-A – 0.4 Km.

Sub-station

(i) Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing line bays of Chandrapur-1 & Chandrapur-2 establishment of 765/400 kV, 3X1500 MVA Raigarh Pooling Station (near Tamnar).

(c) The tariff of the transmission asset from its COD upto 31.3.2019 was determined vide order dated 22.3.2016 in Petition No. 202/TT/2014 as per the 2014 Tariff Regulations. The truing up of the tariff allowed for the transmission asset for the 2014-19 tariff period vide order dated 22.3.2016 is sought, besides determination of the tariff of the 2019-24 tariff period, in the instant petition.

(d) As per the IA, the transmission asset was scheduled to be commercial operation within 15 months from the IA dated 25.11.2011. However, the transmission asset was put into commercial operation on 26.6.2014 after a time over-run of 31 months. The Commission vide order dated 22.3.2016 in Petition No.202/TT/2014 condoned the time over-run from the scheduled date of commercial operation 25.11.2011 up to October, 2013. The subsequent delay of 8 months from November, 2013 to COD i.e. 26.6.2014 was not condoned. Thus, 23 months delay was condoned and 8 months delay was not condoned.

(e) The entire scope of the transmission project is complete and covered in the instant petition.

(f) The Annual Fixed Charges (AFC) approved by the Commission vide order dated 22.3.2016 in Petition No. 202/TT/2014 and the trued up transmission tariff



claimed by the Petitioner for the transmission asset for the 2014-19 tariff period are as under:

(₹in lakh)

Particulars	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges (AFC) approved vide order dated 22.3.2016 in Petition No. 202/TT/2014	171.48	255.52	260.05	261.07	262.17
AFC claimed by the Petitioner based on truing up in the instant petition	150.84	200.45	202.79	212.96	223.29

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

5. The Petitioner has served the petition on the Respondents and notice of this application has also been published in the newspapers in accordance with Section 64 of the Electricity Act 2003 (hereinafter referred to as "the Act"). No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. M.P. Power Management Company Ltd. (MPPMCL), i.e. Respondent No. 1, has filed its reply vide affidavit dated 6.2.2020 and has raised issues of grossing up of Return on Equity (RoE), Additional Capital Expenditure (ACE) and Initial Spares. The Petitioner vide affidavit dated 17.8.2020 has filed its rejoinder to the reply of MPPMCL. The issues raised by MPPMCL and the clarifications issued by the Petitioner are dealt in the relevant portions of the instant order.

6. The hearing in this matter was held on 24.3.2021 through video conference and order was reserved. This order is being issued taking into consideration the



submissions made by the Petitioner in the petition dated 23.10.2019, the Petitioner's affidavits dated 21.9.2020 and 23.3.2021, reply of MPPMCL and Petitioner's rejoinder thereto.

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

TRUING UP OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

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

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	15.60	20.58	20.58	23.06	25.54
Interest on Loan	18.57	22.69	20.68	20.91	21.10
Return on Equity	17.34	22.99	22.99	25.76	28.61
Interest on working capital	6.32	8.47	8.65	9.02	9.39
O & M Expenses	93.01	125.72	129.89	134.21	138.65
Total	150.84	200.45	202.79	212.96	223.29

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

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19
O&M expenses	10.14	10.48	10.82	11.18	11.55
Maintenance Spares	18.25	18.86	19.48	20.13	20.80
Receivables	32.89	33.41	33.80	35.49	37.22
Total	61.28	62.75	64.10	66.80	69.57
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	6.32	8.47	8.65	9.02	9.39



Capital Cost as on COD

10. The Commission vide order dated 22.3.2016 in Petition No. 202/TT/2014 admitted the capital cost of ₹389.61 lakh as on COD and ₹718.89 lakh as on 31.3.2019 of the transmission asset.

11. The Petitioner vide Auditor's Certificate dated 3.8.2019 and 19.3.2021 has submitted the capital cost as on COD and ACE up to 31.3.2019 in respect of the transmission asset. The details of FR approved capital cost, capital cost as on COD, ACE incurred up to 31.3.2019 as claimed by the Petitioner in respect of the transmission asset are as follows:

Approved Cost (FR)	Actual Capital Cost as on COD (As per Auditor's Certificate)	ACE				Total Capital Cost as on 31.3 2019
		2014-15	2015-16	2016-17	2017-18	
1024.96	403.91	6.68	0.00	0.00	93.88	504.47

13. The Petitioner vide affidavit dated 23.3.2021 has placed on record Auditor's Certificate dated 19.3.2021 which states that the Commission disallowed Interest During Construction (IDC) of ₹4.75 lakh and Incidental Expenditure During Construction (IEDC) of ₹0.90 lakh on account of time over-run. Subsequently, liquidated damages (LD) amounting to ₹1.63 lakh was recovered from the contractor and this amount was reduced from the capital cost in the year 2017-18. Since the amount of LD received from the contractor does not exceed IDC and IEDC disallowed by the Commission, the recovered LD has been included in the capital cost of FY 2017-18.



Cost Over-run

14. The completion cost including ACE in respect of transmission asset is ₹504.47 lakh and the approved FR cost is ₹1024.96 lakh. Hence, the completion cost in respect of the transmission asset is within the approved FR cost and, therefore, there is no cost over-run with regard to the transmission asset.

Time Over-run

15. As per the IA dated 26.8.2010, the transmission project was scheduled to be put into commercial operation within 15 months, i.e. by 25.11.2011. The transmission asset was put into commercial operation on 26.6.2014. Thus, there was a time over-run of 31 months. The Commission vide order dated 22.3.2016 in Petition No. 202/TT/2014 condoned the time over-run from 25.11.2011 to October, 2013 (23 months), but did not condone the subsequent delay from November, 2013 to COD i.e. 26.6.2014 (8 months).

Interest During Construction (IDC) and Incidental Expenditure During Construction (IEDC)

16. The Petitioner has claimed IDC for the transmission asset and has submitted an Auditor's Certificate in support of the same. The Petitioner has further submitted in the petition that the entire amount of IDC has been discharged as on COD in respect of the transmission asset.

17. The Commission vide order dated 22.3.2016 in Petition No. 202/TT/2014 has allowed the IDC of ₹14.11 lakh after disallowing the IDC of ₹4.75 lakh due to time over-run. Hence, the IDC of ₹14.11 lakh only has been allowed.



18. The Petitioner has claimed an IEDC of ₹3.54 lakh for the transmission asset and has submitted Auditor's certificate in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the transmission asset. The Commission vide order dated 22.3.2016 in Petition No. 202/TT/2014 has allowed IEDC of ₹2.65 lakh after disallowing IEDC of ₹0.89 lakh due to time over-run. Hence, the IEDC of ₹2.65 lakh has been allowed.

Initial Spares

19. Regulation 13(d) of the 2014 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of the plant and machinery cost up to cut-off date, subject to the following ceiling norms:

*“(d) Transmission System
Transmission line: 1.00%
Transmission sub-station (Green Field): 4.00%
Transmission sub-station (Brown Field): 6.00%
Gas Insulated sub-station:5.00%
Communication System: 3.5%”*

20. The Petitioner has claimed the following Initial Spares for the transmission asset and submitted Auditor's certificate in support of the same. The details of Initial Spares claimed by the Petitioner are as follows:

Particulars	Plant and Machinery Cost (excluding IDC/IEDC, Land cost and cost of civil works (₹ in lakh))	Initial Spares claimed (₹ in lakh)	Ceiling Limit (%)	Initial Spares worked out (₹ in lakh)	Excess Initial Spares (₹ in lakh)
	A	B	C	D= [(A-B)*C/(100-C)]	
Transmission Line	266.51	4.20	1.00	2.65	1.55
Sub-station	188.32	25.00	6.00	10.42	14.58



21. MPPMCL in its reply has submitted that the Petitioner has claimed Initial Spares beyond the ceiling as per the Regulation and requested to disallow the excess initial spares claimed by the Petitioner.

22. In response, the Petitioner has stated that excess initial spares of ₹16.13 lakh have already been reduced from the cost as on COD while calculating the tariff.

23. We have considered the submissions of the Petitioner and MPPMCL. The Initial Spares are allowable subject to the norms specified in Regulation 13(d) of the 2014 Tariff Regulations and is allowed as under:

Particulars	Plant & Machinery Cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Ceiling Limit (%)	Initial Spares as per ceiling limit (₹ in lakh)	Excess Initial Spares dis-allowed (₹ in lakh)
	A	B	C	D= [(A-B)*C/(100-C)]	E=B-D
Transmission Line	183.99	4.20	1.00	1.82	2.38
Sub-station	199.03	25.00	6.00	11.11	13.89

Capital Cost as on COD

24. Accordingly, the capital cost allowed for the transmission asset as on COD is as follows:

(₹ in lakh)				
Capital Cost as on COD as per Auditor Certificate	IDC Disallowed	IEDC Disallowed	Excess Initial Spares disallowed	Capital Cost considered as on COD
A	B	C	D	E=A-B-C-D
403.91	4.75	0.89	16.28	381.99

Additional Capital Expenditure (ACE)

25. The Petitioner has claimed the following ACE for the transmission asset covered and submitted the Auditor's Certificates in support of the same:



(₹ in lakh)

ACE			
2014-15	2015-16	2016-17	2017-18
6.68	0.00	0.00	93.88

26. The Petitioner has submitted that ACE in the year 2014-15 has been claimed under Regulation 14(1)(i) (undischarged liabilities) of the 2014 Tariff Regulations and is within cut-off date. The ACE for the year 2017-18 has been claimed under Regulation 14(2)(iv) of the 2014 Tariff Regulations and is beyond the cut-off date. The Petitioner has submitted Auditor's Certificate in support of the same.

27. The Petitioner vide affidavit dated 21.9.2020 has submitted party wise details of balance and retention payments. The details are as follows:

(₹ in lakh)

Party Name	Particulars	Outstanding as on COD	Discharge			
			2014-15	2015-16	2016-17	2017-18
Jyoti Structures Ltd.	Transmission Line	98.93	6.68	0.00	0.00	92.25

28. Further, the Petitioner vide affidavit dated 23.3.2021 has submitted that the Commission vide order dated 22.3.2016 in Petition No. 202/TT/2014 disallowed IDC and IEDC amounting to ₹5.64 lakh on account of time over-run and reduced it from the capital cost as on the date of commercial operation. Subsequently, an amount of ₹1.63 lakh was recovered as LD from the contractor and has also been reduced from the ACE of 2017-18 and the Petitioner has submitted the Auditor's Certificate dated 3.8.2019. The Petitioner has further submitted that LD recovered to the extent of disallowed IDC and IEDC is added back as ACE in the year 2017-18 and submitted the revised Auditor's Certificate dated 19.3.2021.

29. MPPMCL in its reply has submitted that ACE during 2014-19 period has been approved by the Commission vide order dated 22.3.2016 in Petition No.

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202/TT/2014. MPPMCL has further submitted that the ACE claimed by the Petitioner in 2017-18 for ₹92.25 lakh has not been approved by the Commission vide order dated 22.3.2016 in Petition No. 202/TT/2014 and the same should be allowed after prudence check. In response, the Petitioner in its rejoinder has submitted the details of expenditure in 2017-18. The Petitioner has submitted that ACE claimed in 2017-18 is on account of balance and retention payment after the cut-off date and the same has been claimed under Regulation 14(2)(iv) of the 2014 Tariff Regulations.

30. The capital cost allowed as on 31.3.2019 after including ACE in respect of the transmission asset is as follows:

Asset	Capital cost as on COD on cash basis	ACE				Total Capital cost including ACE as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	
Allowed earlier in order dated 12.5.2016 in Petition No. 264/TT/2015	389.61	0.00	287.90	41.38	329.28	718.89
As claimed by the Petitioner in the instant petition	382.14	6.68	0.00	0.00	93.88	482.70
Allowed after truing up in this order	381.99	6.68	0.00	0.00	93.88	482.55

It is observed that ACE of ₹482.55 lakh claimed by the Petitioner is much lower than the ACE of ₹718.99 lakh approved vide order dated 12.5.2016 in Petition No.264/TT/2015. The Petitioner has not submitted the reasons for such large variation in the projected ACE and the actual ACE. We are of the view that the cost estimates and expenditure projected by the Petitioner should be realistic and



the reasons for any large variations should be explained properly. The Petitioner is directed to be more prudent in preparing cost estimates and projected expenditure in future.

Debt-Equity Ratio

31. The Petitioner has claimed debt-equity ratio of 70:30 as on COD and for ACE post 31.3.2014. The debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of debt-equity ratio in respect of the transmission asset as on COD and 31.3.2019 are as follows:

Asset	Amount as on COD (₹ in lakh)	(%)	Amount as on 31.3.2019 (₹ in lakh)	(%)
Debt	267.40	70.00	337.80	70.00
Equity	114.60	30.00	144.76	30.00
Total	381.99	100.00	482.55	100.00

Depreciation

32. The depreciation has been allowed out as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on COD and approved ACE during the 2014-19 tariff period. The Gross Block during 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is at Annexure-1. WAROD has been worked out after taking into account the depreciation rates of asset specified in the 2014 Tariff Regulations and trued up depreciation allowed for the 2014-19 tariff period is as under:

Particulars	(₹ in lakh)				
	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	381.99	388.67	388.67	388.67	482.55



ACE	6.68	0.00	0.00	93.88	0.00
Closing Gross Block	388.67	388.67	388.67	482.55	482.55
Average Gross Block	385.33	388.67	388.67	435.61	482.55
Weighted average rate of Depreciation (WAROD) (%)	5.29	5.29	5.29	5.29	5.29
Balance useful life of the asset at the beginning of the year (Year)	29.00	29.00	28.00	27.00	26.00
Aggregated Depreciable Value	346.80	349.81	349.81	392.05	434.30
Depreciation during the year	15.59	20.57	20.57	23.05	25.53
Remaining Aggregated Depreciable Value	331.21	313.64	293.07	312.26	328.98
Cummulative Depreciation	15.59	36.17	56.74	79.79	105.32

33. The details of the depreciation allowed in respect of the transmission asset in the order dated 22.3.2016 in Petition No. 202/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

Particulars	(₹ in lakh)				
	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19
Allowed in order dated 22.3.2016 in Petition No. 202/TT/2014	21.50	36.61	37.59	37.59	37.59
Claimed by the Petitioner in the instant petition	15.60	20.58	20.58	23.06	25.54
Allowed after true-up in this order	15.59	20.57	20.57	23.05	25.53

Interest on Loan (IoL)

34. The Petitioner has claimed the weighted average rate of IoL based on its actual loan portfolio and rate of interest. Accordingly, IoL is calculated based on the actual interest rate in accordance with Regulation 26 of the 2014 Tariff Regulations.

35. We have considered the submissions of the Petitioner. The details of trued up IoL allowed for the transmission assets for the 2014-19 period are as follows:

Particular	(₹ in lakh)				
	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19



Gross Normative Loan	267.40	272.08	272.08	272.08	337.80
Cumulative Repayments up to Previous Year	0.00	15.59	36.17	56.74	79.79
Net Loan-Opening	267.40	256.49	235.91	215.34	258.01
Addition due to ACE	4.68	0.00	0.00	65.72	0.00
Repayment during the year	15.59	20.57	20.57	23.05	25.53
Net Loan-Closing	256.49	235.91	215.34	258.01	232.47
Average Loan	261.94	246.20	225.63	236.67	245.24
Weighted Average Rate of Interest on Loan (%)	9.273	9.205	9.163	8.833	8.602
Interest on Loan	18.57	22.66	20.67	20.90	21.10

36. Accordingly, IoL approved in the order dated 22.3.2016 in Petition No. 202/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

Particulars	(₹in lakh)				
	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 22.3.2016 in Petition No. 202/TT/2014	26.19	42.31	40.33	36.88	33.37
Claimed by the Petitioner in the instant petition	18.57	22.69	20.68	20.91	21.10
Allowed after true-up in this order	18.57	22.66	20.67	20.90	21.10

Return on Equity (RoE)

37. The Petitioner has claimed RoE for the transmission asset in terms of Regulations 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 the following effective tax rates for 2014-19 tariff period:

Year	Claimed effective tax (in %)	Grossed up RoE [Base Rate/(1-t)] (in %)
2014-15	21.018	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757



38. 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, it has grossed up the RoE and has not claimed the effective tax rate based on actual taxes paid for 2018-19. MPPMCL has submitted that the Petitioner has neither submitted copy of assessment order for the 2014-15 and 2015-16 nor the Audited accounts in respect of actual taxes paid for 2016-17 and 2017-18 has been enclosed in the instant petition. MPPMCL has further submitted that in the absence of these essential documents, it is not possible to scrutinize the claim of the Petitioner in a proper way.

39. In response, the Petitioner has submitted that the Income Tax assessment of the Petitioner has been completed and assessment orders have been issued by the Income Tax Department in case of 2014-15, 2015-16 and 2016-17 and the Income Tax returns have been filed with the Income Tax Department for the years 2017-18 and 2018-19. The Petitioner has submitted that on the basis of the effective tax rate and grossed up RoE tried up accordingly for the 2014-19 tariff period has already been mentioned in the instant petition for prudence check. The Petitioner has further submitted that the assessment order for the 2014-15 and 2015-16 have already been submitted in Technical Validation reply in Petition No. 20/TT/2020 and has also placed on record a copy of the assessment order for the year 2016-17 vide affidavit dated 17.8.2020.

40. We have considered the submissions of the Petitioner and MPPMCL. As regards the MPPMCL's contentions that the grossed up rate of RoE for the period 2016-17 and 2017-18 is not based on the MAT rates approved by the Income Tax



Authorities, it is observed that effective rate of tax considered for 2014-15, 2015-16 and 2016-17 are based on Assessment Orders issued by Income Tax Authorities and effective rate of tax considered for 2017-18 and 2018-19 are based on the Income Tax returns filed for the purpose of grossing up the RoE rate of respective years. In view of the clarification given by the Petitioner, we are of the view that there is no merit in the contentions of MPPMCL.

41. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates.

The relevant portion of the order dated 27.4.2020 is as under:

“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

42. The MAT rates considered in order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of the rate of RoE for



truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations, which are as follows:

Year	MAT Rate (%)	Grossed up RoE [Base Rate/(1-t)] (%)
2014-15	20.961	19.610
2015-16	21.342	19.705
2016-17	21.342	19.705
2017-18	21.342	19.705
2018-19	21.549	19.758

43. Accordingly, the trued up RoE allowed for the transmission asset for the 2014-19 period is as follows:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19
Opening Equity	114.60	116.60	116.60	116.60	144.76
Addition due to ACE	2.00	0.00	0.00	28.16	0.00
Closing Equity	116.60	116.60	116.60	144.76	144.76
Average Equity	115.60	116.60	116.60	130.68	144.76
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax)	17.33	22.98	22.98	25.75	28.60

44. The details of the RoE allowed in the order dated 22.3.2016 in Petition No. 202/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 22.3.2016 in Petition No. 202/TT/2014	23.99	41.08	42.29	42.29	42.29
Claimed by the Petitioner in the instant petition	17.34	22.99	22.99	25.76	28.61
Allowed after true-up in this order	17.33	22.98	22.98	25.75	28.60

Operation & Maintenance Expenses (O&M Expenses)



45. The details of the O&M Expenses claimed by the Petitioner in respect of the transmission asset and allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations are as under:

(₹ in lakh)					
Particulars	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19
Sub-station Bays (Number)					
Raipur:Bus Sectionaliser Bay for 400 kV Bus-I (Number)	1	1	1	1	1
Raipur:Bus Sectionaliser Bay for 400 kV Bus-II (Number)	1	1	1	1	1
Norm (₹ lakh/bay)					
400 kV	60.30	62.30	64.37	66.51	68.71
Total Sub-station O&M Expenses (₹ in lakh)	120.60	124.60	128.74	133.02	137.42
AC & HVDC Lines					
400 kV Shifting of Chandrapur-2 & Chandrapur-3 Line Bays from Section Raipur-B to Raipur-A	2.154	2.154	2.154	2.154	2.154
400 kV Shifting of Chandrapur-2 & Chandrapur-3 Line Bays from Section Raipur- B to Raipur-A	0.296	0.296	0.296	0.296	0.296
Norm (₹ lakh/KM)					
Single Circuit (Twin/ Triple Conductor)	0.404	0.418	0.432	0.446	0.461
Double Circuit (Twin/ Triple Conductor)	0.707	0.731	0.755	0.780	0.806
Total Transmission Line	1.08	1.12	1.15	1.19	1.23
Total O&M Expenses	93.01	125.72	129.89	134.21	138.65

46. The details of the O&M Expenses approved in order dated 22.3.2016 in Petition No. 202/TT/2014, O&M Expenses claimed by the Petitioner in the instant petition and trued up O&M Expenses allowed in the instant order are as follows:

(₹ in lakh)					
Particulars	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19



Allowed in order dated 22.3.2016 in Petition No. 202/TT/2014	93.01	125.72	129.89	134.21	138.65
Claimed by the Petitioner in the instant petition	93.01	125.72	129.89	134.21	138.65
Allowed after true-up in this order	93.01	125.72	129.89	134.21	138.65

Interest on Working Capital (IWC)

47. The Petitioner is entitled to claim IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as under:

i. Maintenance spares:

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses.

ii. O & M Expenses:

O&M Expenses have been considered for one month of the allowed O&M Expenses.

iii. Receivables:

The receivables have been worked out on the basis of 2 months of annual transmission charges as worked out above.

iv. Rate of interest on working capital:

Rate of interest on working capital is considered on normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.

48. Accordingly, the trued up IWC allowed for the transmission asset is as follows:

Particulars	(₹ in lakh)				
	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19
O & M Expenses	10.14	10.48	10.82	11.18	11.55



(O&M expenses for 1 month)					
Maintenance Spares (15% of O&M expenses)	18.25	18.86	19.48	20.13	20.80
Receivables (Equivalent to 2 months of annual fixed cost / annual transmission charges)	32.88	33.40	33.80	35.49	37.21
Total	61.28	62.73	64.10	66.81	69.56
Rate of Interest on working capital(%)	13.50	13.50	13.50	13.50	13.50
Interest of working Capital	6.32	8.47	8.65	9.02	9.39

49. The details of the IWC approved in the order dated 22.3.2016 in Petition No. 202/TT/2014, trued up IWC claimed by the Petitioner and trued up IWC allowed in the instant order are as follows:

Particulars	(₹ in lakh)				
	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 22.3.2016 in Petition No. 202/TT/2014	6.79	9.71	9.94	10.10	10.27
Claimed by the Petitioner in the instant petition	6.32	8.47	8.65	9.02	9.39
Allowed after true-up in this order	6.32	8.47	8.65	9.02	9.39

Approved Annual Fixed Charges for the 2014-19 Tariff Period

50. The trued up annual fixed charges approved for the transmission asset for 2014-19 tariff period are as follows:

Particulars	(₹ in lakh)				
	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	15.59	20.57	20.57	23.05	25.53
Interest on Loan	18.57	22.66	20.67	20.90	21.10
Return on Equity	17.33	22.98	22.98	25.75	28.60
Int. on Working Capital	6.32	8.47	8.65	9.02	9.39
Op. and Maintenance	93.01	125.72	129.89	134.21	138.65
Total	150.82	200.40	202.77	212.94	223.27



51. Accordingly, the annual transmission charges approved in the order dated 22.3.2016 in Petition No. 202/TT/2014, trued up AFC claimed by the Petitioner in the instant petition and trued up AFC allowed in the instant order are as follows:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19
Allowed in order dated 22.3.2016 in Petition No. 202/TT/2014	171.48	255.52	260.05	261.07	262.17
Claimed by the Petitioner in the instant petition	150.84	200.45	202.79	212.96	223.29
Allowed after true-up in this order	150.82	200.40	202.77	212.94	223.27

DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD

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

(₹ in lakh)

Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	25.54	25.54	25.54	25.54	25.54
Interest on Loan	18.87	16.59	14.33	12.07	9.82
Return on Equity	27.20	27.20	27.20	27.20	27.20
Interest on Working Capital	3.95	4.02	4.09	4.17	4.24
Operation and Maintenance	65.94	68.25	70.64	73.11	75.67
Total	141.50	141.60	141.80	142.09	142.47

53. The Petitioner has claimed the following IWC for the Asset for 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	5.50	5.69	5.89	6.09	6.31
Maintenance Spares	9.89	10.24	10.60	10.97	11.35
Receivables	17.40	17.46	17.48	17.52	17.52
Total	32.79	33.39	33.97	34.58	35.18
Rate of Interest	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	3.95	4.02	4.09	4.17	4.24

Capital Cost

54. Regulation 19 of the 2019 Tariff Regulations provides as under:

"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 up to 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 ash disposal and utilization including handling and transportation facility;*
- (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 up to 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 GrameenVidyutikaranYojana (RGGVY) and DeendayalUpadhyaya Gram JyotiYojana (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 decapitalised 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.”

55. The admitted capital cost of ₹482.55 lakh as on 31.3.2019 as trued up in above paragraphs is considered as the capital cost as on 1.4.2019 for the purpose of determination of tariff for 2019-24 tariff period.

56. The Petitioner has not claimed any ACE during 2019-24 tariff period.



Debt-Equity Ratio

57. Regulations 18(3), 18(4) and 18(5) of the 2019 Tariff Regulations provide as follows:

"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.”

58. The details of the debt-equity considered for the purpose of computation of tariff of 2019-24 tariff period for the transmission asset are as follows:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	337.80	70.00	337.80	70.00
Equity	144.76	30.00	144.76	30.00
Total	482.55	100.00	482.55	100.00

Depreciation

59. Regulations 33 of the 2019 Tariff Regulations provides as under:

“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.

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."

60. We have considered the submissions of the Petitioner. The weighted average rate of depreciation (WAROD) has been worked out (as given in Annexure-2) after taking into account the depreciation rates specified in the 2019 Tariff Regulations. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed for the transmission asset for the 2019-24 tariff period is as follows:



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	482.55	482.55	482.55	482.55	482.55
Addition during the year 2019-24 due to projected ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	482.55	482.55	482.55	482.55	482.55
Average Gross Block	482.55	482.55	482.55	482.55	482.55
Weighted average rate of Depreciation (WAROD) (%)	5.29	5.29	5.29	5.29	5.29
Balance useful life at the beginning (Year)	25.00	24.00	23.00	22.00	21.00
Aggregated Depreciable Value	434.30	434.30	434.30	434.30	434.30
Combined Depreciation during the year	25.53	25.53	25.53	25.53	25.53
Remaining Aggregate Depreciable Value at the end of the year	303.44	277.91	252.38	226.85	201.32
Aggregate Cumulative Depreciation at the end of the year	130.85	156.39	181.92	207.45	232.98

Interest on Loan (IoL)

61. Regulation 32 of the 2019 Tariff Regulations provides as under:

"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 up to 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”.

62. The weighted average rate of IoL has been considered on the basis of the rates prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rates of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. In view of above, the IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL allowed for the transmission asset for the 2019-24 tariff period is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	337.80	337.80	337.80	337.80	337.80
Cumulative Repayments up to Previous Year	105.32	130.85	156.39	181.92	207.45
Net Loan-Opening	232.47	206.94	181.41	155.88	130.35
Addition due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	25.53	25.53	25.53	25.53	25.53
Net Loan-Closing	206.94	181.41	155.88	130.35	104.82
Average Loan	219.71	194.18	168.65	143.12	117.59
Weighted Average Rate of Interest on Loan (%)	8.586	8.544	8.493	8.430	8.349
Interest on Loan	18.86	16.59	14.32	12.06	9.82

Return on Equity (RoE)

63. Regulations 30 and 31 of the 2019 Tariff Regulations provides 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 excluding Additional Capitalization due to Change in Law, 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:

i. 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."

64. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, the MAT rate applicable during the year 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. The RoE allowed for the transmission asset for the 2019-24 tariff period is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	144.76	144.76	144.76	144.76	144.76
Addition due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	144.76	144.76	144.76	144.76	144.76
Average Equity	144.76	144.76	144.76	144.76	144.76
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782



Return on Equity (Pre-tax)	27.19	27.19	27.19	27.19	27.19
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Operation & Maintenance Expenses (O&M Expenses)

65. Regulation 35(3)(a) and 35(4) of the 2019 Tariff Regulations provides as under:

“35(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 (₹ 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 (₹ 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 (₹ 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 (₹ 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
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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 (2000 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.”

66. The O&M Expenses claimed by the Petitioner in respect of the transmission asset are as under:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station Bays (Number)					
Raipur:Bus Sectionaliser Bay for 400 kV Bus-I (Number)	1	1	1	1	1
Raipur:BusSectionaliser Bay for 400 kV Bus-II (Number)	1	1	1	1	1
Norm (₹ lakh/bay)					
400 kV	32.15	33.28	34.45	35.66	36.91
Total Sub-station O&M	64.30	66.56	68.90	71.32	73.82
AC & HVDC Lines					
400 kV Shifting of Chandrapur-2 & Chandrapur-3 Line Bays from Section Raipur-B to Raipur-A	2.154	2.154	2.154	2.154	2.154
400 kV Shifting of Chandrapur-2 & Chandrapur-3 Line Bays from Section Raipur- B to Raipur-A	0.296	0.296	0.296	0.296	0.296
Norm (₹ lakh/KM)					
Single Circuit (Twin/ Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Double Circuit (Twin/ Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Total Transmission Line	1.34	1.39	1.44	1.49	1.55
Communication System					
PLCC (₹ in lakh)	14.81	14.81	14.81	14.81	14.81
Norms (%)	2	2	2	2	2
Total Communication System	0.30	0.30	0.30	0.30	0.30
Total O&M Expenses	65.94	68.25	70.64	73.11	75.67

67. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 @2% of its original project cost in the instant petition and the Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 and 2019 Tariff Regulations and the norms for sub-station has been specified



accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. The relevant portions of the order dated 24.1.2021 in Petition No.126/TT/2020 are extracted hereunder.

"103. Thus, although PLCC equipment is a communication system, it has been considered as a part of sub-station, as it is used both for protection and communication. Therefore, we are of the considered view that rightly, it was not considered for separate O&M Expenses while framing norms of O&M for 2019-24 tariff period. While specifying norms for bays and transformers, O&M Expenses for PLCC have been included within norms for O&M Expenses for sub-station. Norms of O&M Expenses @2% of the capital cost in terms of Regulation 35(4) of the 2019 Tariff Regulations have been specified for communication system such as PMU, RMU, OPGW etc. and not for PLCC equipment."

"105. In our view, granting of O&M Expenses for PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations under the communication system head would tantamount to granting O&M Expenses twice for PLCC equipment as PLCC equipment has already been considered as part of the sub-station. Therefore, the Petitioner's prayer for grant of O&M Expenses for the PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations is rejected."

106. The principle adopted in this petition that PLCC is part of sub-station and accordingly no separate O&M Expenses is admissible for PLCC equipment in the 2019-24 tariff period under Regulation 35(4) of the 2019 Tariff Regulations shall be applicable in case of all petitions where similar claim is made by the Petitioner. As already mentioned, the Commission, however, on the basis of the claim made by the Petitioner has inadvertently allowed O&M Expenses for PLCC equipment @2% of its original project cost, which is applicable for other "communication system", for 2019-24 period in 31 petitions given in Annexure-3 of this order. Therefore, the decision in this order shall also be applicable to all the petitions given in Annexure-3. Therefore, PGCIL is directed to bring this decision to the notice of all the stakeholders in the 31 petitions given in Annexure-3 and also make revised claim of O&M Expenses for PLCC as part of the sub-station at the time of truing up of the tariff allowed for 2019-24 period in respective petitions."

68. The O&M Expenses allowed for the transmission asset covered in the instant petition are as under:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station Bays (Number)					
Raipur:Bus Sectionaliser Bay for 400 kV Bus-I (Number)	1	1	1	1	1

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Raipur:Bus Sectionaliser Bay for 400 kV Bus-II (Number)	1	1	1	1	1
Norm (₹ lakh/bay)					
400 kV	32.15	33.28	34.45	35.66	36.91
Total Sub-station O&M	64.30	66.56	68.90	71.32	73.82
AC & HVDC Lines					
400kV Shifting of Chandrapur-2 & Chandrapur-3 Line Bays from Section Raipur-B to Raipur-A	2.154	2.154	2.154	2.154	2.154
400kV Shifting of Chandrapur-2 & Chandrapur-3 Line Bays from Section Raipur- B to Raipur-A	0.296	0.296	0.296	0.296	0.296
Norm (₹ lakh/km)					
Single Circuit (Twin/ Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Double Circuit (Twin/ Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Total Transmission Line	1.34	1.39	1.44	1.49	1.54
Total O&M Expenses	65.64	67.95	70.34	72.81	75.36

Interest on Working Capital (IWC)

69. Regulations 34(1)(c), 34(3) and 34(4) and Regulation 3(7) of the 2019 Tariff

Regulations provides as follows:

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

(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.”

(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.”



“3. Definition - In these regulations, unless the context otherwise requires:-

(7) **‘Bank Rate’** means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;”

70. The Petitioner has submitted that it has computed the IWC for the 2019-24 tariff period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20 and 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-24. The components of the working capital and interest allowed thereon is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses (O&M expenses for 1 month)	5.47	5.66	5.86	6.07	6.28
Maintenance Spares (15% of O&M expenses)	9.85	10.19	10.55	10.92	11.30
Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	17.36	17.38	17.41	17.44	17.44
Total	32.67	33.24	33.82	34.43	35.02
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest of working capital	3.94	3.74	3.80	3.87	3.94

Annual Fixed Charges for the 2019-24 Tariff Period

71. The transmission charges allowed for the transmission asset for the 2019-24 tariff period are as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	25.53	25.53	25.53	25.53	25.53
Interest on Loan	18.86	16.59	14.32	12.06	9.82
Return on Equity	27.19	27.19	27.19	27.19	27.19
Interest on Working Capital	3.94	3.74	3.80	3.87	3.94
Operation and Maintenance	65.64	67.95	70.34	72.81	75.36



Total	141.16	141.00	141.19	141.47	141.84
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Filing Fee and Publication Expenses

72. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 70(1) of the 2019 Tariff Regulations. 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 and RLDC Fees and Charges

73. 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 tariff 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 tariff period.

Goods and Services Tax

74. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if at any time GST on transmission is withdrawn from negative list in future. We have considered the submission of the Petitioner and are of the opinion that GST is not levied on transmission service at present. Therefore, we are of the view that Petitioner’s prayer is premature and the Petitioner is at liberty to approach this Commission if GST is levied upon transmission service in future.

Security Expenses

75. The Petitioner has submitted that security expenses in respect of the transmission asset are not claimed in the instant petition and 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 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 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.

76. 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. It is observed 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.

Capital Spares

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

Sharing of Transmission Charges



78. The billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for 2019-24 tariff period.

79. To summarise:

(a) The trued-up Annual Fixed Charges approved for the transmission asset for 2014-19 tariff period are:

(₹ in lakh)					
Asset	2014-15 (Pro-rata for 279 days)	2015-16	2016-17	2017-18	2018-19
AFC	150.82	200.40	202.77	212.94	223.27

(b) The Annual Fixed Charges allowed in respect of the transmission asset for 2019-24 tariff period are:

(₹ in lakh)					
Asset	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	141.16	141.00	141.19	141.47	141.84

80. Annexure-1 and Annexure-2 to this order form part of the order.

81. This order disposes of Petition No. 9/TT/2020 in terms of the above discussion and findings.

Sd/
(Pravas Kumar Singh)
Member

Sd/
(ArunGoyal)
Member

Sd/
(I.S. Jha)
Member

Sd/
(P. K. Pujari)
Chairperson



Annexure – 1

2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)				Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations							
		2014-15	2015-16	2016-17	2017-18			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)			
Capital Expenditure as on COD															
Building	5.39	0.00	0.00	0.00	0.00	5.39	3.34	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Transmission Line	182.71	6.68	0.00	0.00	93.88	283.27	5.28	9.82	10.00	10.00	12.48	14.96	14.96	14.96	14.96
Sub Station	178.96	0.00	0.00	0.00	0.00	178.96	5.28	9.45	9.45	9.45	9.45	9.45	9.45	9.45	9.45
PLCC	14.93	0.00	0.00	0.00	0.00	14.93	6.33	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
TOTAL	381.99	6.68	0.00	0.00	93.88	482.55		20.40	20.57	20.57	23.05	25.53	25.53	25.53	25.53
						Average Gross Block (₹ in lakh)		385.33	388.67	388.67	435.61	482.55	482.55	482.55	482.55
						Weighted Average Rate of Depreciation (%)		5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29



Annexure – 2

2019-24 Capital Expenditure as on 1.4.2019	Combined admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
				2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Building	5.39	5.39	3.34	0.18	0.18	0.18	0.18	0.18
Transmission Line	283.27	283.27	5.28	14.96	14.96	14.96	14.96	14.96
Sub Station	178.96	178.96	5.28	9.45	9.45	9.45	9.45	9.45
PLCC	14.93	14.93	6.33	0.94	0.94	0.94	0.94	0.94
TOTAL	482.55	482.55		25.53	25.53	25.53	25.53	25.53
		Average Gross Block (₹ in lakh)		482.55	482.55	482.55	482.55	482.55
		Weighted Average Rate of Depreciation (%)		5.29	5.29	5.29	5.29	5.29



Summary of Tariff

Form No. - 1

Name of the Transmission Licensee:		Power Grid Corporation of India Limited			
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S				
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I				
Region	Western Region	DOC Date	Jun 26, 2014		

(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	25.54	25.54	25.54	25.54	25.54
Interest on Loan-Form No. 9E	18.80	16.30	14.04	11.91	9.80
Return on Equity-Form No. 8	27.19	27.19	27.19	27.19	27.19
Int. on Working capital-Form No.11	3.94	3.74	3.54	3.61	4.21
Op. and maintenance-Form No.2	65.64	67.95	70.34	72.81	75.37
Total AFC	141.11	140.72	140.65	141.06	142.11



Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S	
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I	
Region	Western Region	DOCO Date Jun 26, 2014

1. Transmission Lines

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/HVDC	S/C or D/C	No of Sub-Conductors	Voltage Level KV	Line Bays	Line Reactor (Including Switchable Reactor)	Line Length Km	Date of Commercial operation	Covered in the present petition	
									Yes/No	If No, Petition No.
SHIFTING OF CHANDRAPUR -2 & CHANDRAPUR -3 LINE BAYS FROM SECTION RAIPUR - B TO RAIPUR- A	AC	SC	2	400 KV	0.000	0.000	2.154	Jun 26, 2014	Y	
SHIFTING OF CHANDRAPUR -2 & CHANDRAPUR -3 LINE BAYS FROM SECTION RAIPUR - B TO RAIPUR- A	AC	DC	2	400 KV	0.000	0.000	0.296	Jun 26, 2014	Y	

Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
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SINGLE CIRCUIT (TWIN CONDUCTOR)

Normative Rate of O&M as per Regulation	0.503	0.521	0.539	0.558	0.578
No. of Units - (Length in KM)	2.154	2.154	2.154	2.154	2.154



O&M Claimed	1.08	1.12	1.16	1.20	1.25
DOUBLE CIRCUIT (TWIN CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.881	0.912	0.944	0.977	1.011
No. of Units - (Length in KM)	0.296	0.296	0.296	0.296	0.296
O&M Claimed	0.26	0.27	0.28	0.29	0.30

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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 Yes/ No, Petition No.
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV		
Rajpur:BUS SECTIONALISER BAY FOR 400 KV BUS-I : 01 BAY	Conventional	400 KV		1.000								Jun 26, 2014	Y
Rajpur:BUS SECTIONALISER BAY FOR 400 KV BUS-II : 01 BAY	Conventional	400 KV		1.000								Jun 26, 2014	Y

Summary:

Q&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		2.00	2.00	2.00	2.00	2.00
O&M Claimed		64.30	66.56	68.90	71.32	73.82



WSP

3. Communication System

Summary:

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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	1.34	1.39	1.44	1.49	1.55
Substation	64.30	66.56	68.90	71.32	73.82
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	65.64	67.95	70.34	72.81	75.37
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	65.64	67.95	70.34	72.81	75.37

WZ

(Petitioner)



Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S		
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I		
Region	Western Region	DOCO Date	Jun 26, 2014

(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	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S				
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I				
Region	Western Region	DOC Date	Jun 26, 2014		

(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	144.75	144.75	144.75	144.75	144.75
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)	144.75	144.75	144.75	144.75	144.75
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	144.75	144.75	144.75	144.75	144.75
Average Normative Equity	144.75	144.75	144.75	144.75	144.75
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	27.19	27.19	27.19	27.19	27.19
Pro rata return on Equity	27.19	27.19	27.19	27.19	27.19



Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S				
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I				
Region	Western Region	DOC Date	Jun 26, 2014		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
BOND XXXVII -LOAN-1					
Gross Loan- Opening	50.00	50.00	50.00	50.00	50.00
Cumulative repayments of Loans upto previous year	16.67	20.83	25.00	29.17	33.33
Net loan-Opening	33.33	29.17	25.00	20.83	16.67
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	4.17	4.17	4.17	4.17	4.17
Net Loan-Closing	29.16	25.00	20.83	16.66	12.50
Average Net Loan	31.25	27.09	22.92	18.75	14.59
Rate of Interest on Loan on Annual Basis	9.25	9.25	9.25	9.25	9.25
Interest on loan	2.8906	2.5058	2.1201	1.7344	1.3496

BOND XL -LOAN-2					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Loan- Opening	39.64	39.64	39.64	39.64	39.64
Cumulative repayments of Loans upto previous year	9.91	13.21	16.52	19.82	23.12
Net loan-Opening	29.73	26.43	23.12	19.82	16.52
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	3.30	3.30	3.30	3.30	3.30
Net Loan-Closing	26.43	23.13	19.82	16.52	13.22



Average Net Loan	28.08	24.78	21.47	18.17	14.87
Rate of Interest on Loan on Annual Basis	9.30	9.30	9.30	9.30	9.30
Interest on loan	2.6114	2.3045	1.9967	1.6898	1.3829

BOND - XLI -LOAN-3					
Gross Loan- Opening	103.00	103.00	103.00	103.00	103.00
Cumulative repayments of Loans upto previous year	25.75	34.33	42.92	51.50	60.08
Net loan-Opening	77.25	68.67	60.08	51.50	42.92
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	8.58	8.58	8.58	8.58	8.58
Net Loan-Closing	68.67	60.09	51.50	42.92	34.34
Average Net Loan	72.96	64.38	55.79	47.21	38.63
Rate of Interest on Loan on Annual Basis	8.85	8.85	8.85	8.85	8.85
Interest on loan	6.457	5.6976	4.9374	4.1781	3.4188

BOND - XLV -DOCO					
Gross Loan- Opening	45.00	45.00	45.00	45.00	45.00
Cumulative repayments of Loans upto previous year	7.50	11.25	15.00	18.75	22.50
Net loan-Opening	37.50	33.75	30.00	26.25	22.50
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	3.75	3.75	3.75	3.75	3.75
Net Loan-Closing	33.75	30.00	26.25	22.50	18.75
Average Net Loan	35.63	31.88	28.13	24.38	20.63
Rate of Interest on Loan on Annual Basis	9.65	9.65	9.65	9.65	9.65
Interest on loan	3.4383	3.0764	2.7145	2.3527	1.9908



SBI (2014-15) -ADDCAP 2017-18					
Gross Loan- Opening	1.14	1.14	1.14	1.14	1.14
Cumulative repayments of Loans upto previous year	0.00	0.11	0.23	0.34	0.46
Net loan-Opening	1.14	1.03	0.91	0.80	0.68
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.11	0.11	0.11	0.11	0.11
Net Loan-Closing	1.03	0.92	0.80	0.69	0.57
Average Net Loan	1.09	0.98	0.86	0.75	0.63
Rate of Interest on Loan on Annual Basis	7.993319	6.894349	6.65	7.243625	8.135644
Interest on loan	0.0871	0.0676	0.0572	0.0543	0.0513

SBI (2014-15) -LOAN-4					
Gross Loan- Opening	29.76	29.76	29.76	29.76	29.76
Cumulative repayments of Loans upto previous year	0.00	2.98	5.95	8.93	11.90
Net loan-Opening	29.76	26.78	23.81	20.83	17.86
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	2.98	2.98	2.98	2.98	2.98
Net Loan-Closing	26.78	23.80	20.83	17.85	14.88
Average Net Loan	28.27	25.29	22.32	19.34	16.37
Rate of Interest on Loan on Annual Basis	7.993319	6.894349	6.65	7.243625	8.135644
Interest on loan	2.2597	1.7436	1.4843	1.4009	1.3318

BOND XLVIII -ADDCAP 2014-15					
Gross Loan- Opening	4.68	4.68	4.68	4.68	4.68
Cumulative repayments of Loans upto previous year	0.00	1.17	1.17	2.34	2.34
Net loan-Opening	4.68	3.51	3.51	2.34	2.34



Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	1.17	0.00	1.17	0.00	0.00
Net Loan-Closing	3.51	3.51	2.34	2.34	2.34
Average Net Loan	4.10	3.51	2.93	2.34	2.34
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.3362	0.2878	0.2403	0.1919	0.1919

BOND 59 -ADD CAP 2017-18

Gross Loan- Opening	28.06	28.06	28.06	28.06	28.06
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	28.06	28.06	28.06	28.06	28.06
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	28.06	28.06	28.06	28.06	28.06
Average Net Loan	28.06	28.06	28.06	28.06	28.06
Rate of Interest on Loan on Annual Basis	7.30	7.30	7.30	7.30	7.30
Interest on loan	2.0484	2.0484	2.0484	2.0484	2.0484

BOND60 (LX) -ADD CAP 2017-18

Gross Loan- Opening	36.52	36.52	36.52	36.52	36.52
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	36.52	36.52	36.52	36.52	36.52
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	36.52	36.52	36.52	36.52	36.52
Average Net Loan	36.52	36.52	36.52	36.52	36.52



Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	2.6294	2.6294	2.6294	2.6294	2.6294

Summary

Gross Loan- Opening	337.80	337.80	337.80	337.80	337.80
Cumulative repayments of Loans upto previous year	59.83	83.88	106.79	130.85	153.73
Net loan-Opening	277.97	253.92	231.01	206.95	184.07
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	24.06	22.89	24.06	22.89	22.89
Net Loan-Closing	253.91	231.03	206.95	184.06	161.18
Average Net Loan	265.96	242.49	219.00	195.52	172.64
Rate of Interest on Loan on Annual Basis	8.557	8.3967	8.3234	8.3265	8.3381
Interest on loan	22.7581	20.3611	18.2283	16.2799	14.3949

(Petitioner)



Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S			
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I			
Region	Western Region	DOC Date	Jun 26, 2014	

(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	337.80	337.80	337.80	337.80	337.80
Cumulative repayments of Normative loan upto previous year	105.32	130.86	156.40	181.94	207.48
Net normative loan-Opening	232.48	206.94	181.40	155.86	130.32
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	25.54	25.54	25.54	25.54	25.54
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	206.94	181.40	155.86	130.32	104.78
Average normative loan	219.71	194.17	168.63	143.09	117.55
Weighted Average Rate of interest on actual loan	8.557	8.3967	8.3234	8.3265	8.3381
Interest on normative loan	18.80	16.30	14.04	11.91	9.80
Pro rata interest on normative loan	18.80	16.30	14.04	11.91	9.80

(Petitioner)



Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S		
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I		
Region	Western Region	DOC Date	Jun 26, 2014

(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	5.39	0.00	5.39	5.39	3.34	0.18
Transmission Line	283.27	0.00	283.27	283.27	5.28	14.96
Sub Station	178.96	0.00	178.96	178.96	5.28	9.45
Comm. Sys. excluding Fiber Optic	14.93	0.00	14.93	14.93	6.33	0.95
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
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	482.55	0.00	482.55	482.55	0.00	25.54
Weighted Average Rate of Depreciation(%)					5.292716	

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



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Civil & Building	5.39	0.00	5.39	5.39	3.34	0.18
Transmission Line	283.27	0.00	283.27	283.27	5.28	14.96
Sub Station	178.96	0.00	178.96	178.96	5.28	9.45
Comm. Sys. excluding Fiber Optic	14.93	0.00	14.93	14.93	6.33	0.95
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
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	482.55	0.00	482.55	482.55	0.00	25.54
Weighted Average Rate of Depreciation(%)					5.292716	

2021-22						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	5.39	0.00	5.39	5.39	3.34	0.18
Transmission Line	283.27	0.00	283.27	283.27	5.28	14.96
Sub Station	178.96	0.00	178.96	178.96	5.28	9.45
Comm. Sys. excluding Fiber Optic	14.93	0.00	14.93	14.93	6.33	0.95
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
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	482.55	0.00	482.55	482.55	0.00	25.54
Weighted Average Rate of Depreciation(%)					5.292716	



2022-23

Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	5.39	0.00	5.39	5.39	3.34	0.18
Transmission Line	283.27	0.00	283.27	283.27	5.28	14.96
Sub Station	178.96	0.00	178.96	178.96	5.28	9.45
Comm. Sys. excluding Fiber Optic	14.93	0.00	14.93	14.93	6.33	0.95
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
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	482.55	0.00	482.55	482.55	0.00	25.54
Weighted Average Rate of Depreciation(%)					5.292716	

2023-24

Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	5.39	0.00	5.39	5.39	3.34	0.18
Transmission Line	283.27	0.00	283.27	283.27	5.28	14.96
Sub Station	178.96	0.00	178.96	178.96	5.28	9.45
Comm. Sys. excluding Fiber Optic	14.93	0.00	14.93	14.93	6.33	0.95
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
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	482.55	0.00	482.55	482.55	0.00	25.54



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Weighted Average Rate of Depreciation(%)					5.292716	
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(Petitioner)



Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S			
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I			
Region	Western Region	DOC Date	Jun 26, 2014	

(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	29.00	29.00	29.00	29.00	29.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	4.00	5.00	6.00	7.00	8.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	25.00	24.00	23.00	22.00	21.00
Capital Base					
1.4 Opening capital cost	482.55	482.55	482.55	482.55	482.55
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	482.55	482.55	482.55	482.55	482.55
1.8 Average capital cost	482.55	482.55	482.55	482.55	482.55
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	0.00	0.00	0.00	0.00	0.00
1.11 Asset having 10% salvage value included in 1.8	482.55	482.55	482.55	482.55	482.55
1.12 Depreciable Value(1.10+90% of 1.11)	434.29	434.29	434.29	434.29	434.29
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	5.292716	5.292716	5.292716	5.292716	5.292716



1.14 Depreciation(for the period)	25.54	25.54	25.54	25.54	25.54
1.15 Depreciation(Annualised)	25.54	25.54	25.54	25.54	25.54
1.16 Cumulative depreciation at the beginning of the period	105.31	130.85	156.39	181.93	207.47
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	130.85	156.39	181.93	207.47	233.01
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00

(Petitioner)



Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S			
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I			
Region	Western Region	DOC Date	Jun 26, 2014	

(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	5.47	5.66	5.86	6.07	6.28
Maintenance spares 15% of O&M Expenses	9.85	10.19	10.55	10.92	11.31
Receivables equivalent to 45 days of AFC	17.35	17.35	17.34	17.39	17.47
Total Working capital	32.67	33.20	33.75	34.38	35.06
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	3.94	3.74	3.54	3.61	4.21
Pro rata interest on working capital	3.94	3.74	3.54	3.61	4.21



Summary of Tariff

Form No. - 1

Name of the Transmission Licensee: Power Grid Corporation of India Limited	
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I
Region	Western Region
DOC Date	Jun 26, 2014

(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	26.83	26.56	24.59	7.25	7.25
Interest on Loan-Form No. 9E	7.53	5.24	3.08	1.82	1.40
Return on Equity-Form No. 8	27.19	27.19	27.19	27.19	27.19
Int. on Working capital-Form No.11	3.52	3.62	3.70	3.57	3.72
Op. and maintenance-Form No.2	60.37	63.55	66.87	70.39	74.07
Total AFC	125.44	126.16	125.43	110.22	113.63



Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S	
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I	
Region	Western Region	DOCO Date Jun 26, 2014

1. Transmission Lines

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/HVDC	S/C or D/C	No of Sub-Conductors	Voltage Level KV	Line Bays	Line Reactor (Including Switchable Reactor)	Line Length Km	Date of Commercial operation	Covered in the present petition	
									Yes/No	If No, Petition No.
SHIFTING OF CHANDRAPUR -2 & CHANDRAPUR -3 LINE BAYS FROM SECTION RAIPUR - B TO RAIPUR- A	AC	SC	2	400 KV	0.000	0.000	2.154	Jun 26, 2014	Y	
SHIFTING OF CHANDRAPUR -2 & CHANDRAPUR -3 LINE BAYS FROM SECTION RAIPUR - B TO RAIPUR- A	AC	DC	2	400 KV	0.000	0.000	0.296	Jun 26, 2014	Y	

Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
SINGLE CIRCUIT (TWIN CONDUCTOR)					
Normal Rate of O&M as per Regulation	0.492	0.518	0.545	0.573	0.603
No. of Units (Length in KM)	2.154	2.154	2.154	2.154	2.154



O&M Claimed	1.06	1.12	1.17	1.23	1.30
DOUBLE CIRCUIT (TWIN CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.861	0.906	0.953	1.003	1.056
No. of Units - (Length in KM)	0.296	0.296	0.296	0.296	0.296
O&M Claimed	0.25	0.27	0.28	0.30	0.31

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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 Yes/ No	
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV			
Raipur:BUS SECTIONALISER BAY FOR 400 KV BUS-I : 01 BAY	Conventional	400 KV		1.000									Jun 26, 2014	Y
Raipur:BUS SECTIONALISER BAY FOR 400 KV BUS-II : 01 BAY	Conventional	400 KV		1.000									Jun 26, 2014	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	2.00	2.00	2.00	2.00	2.00
O&M Claimed	59.06	62.16	65.42	68.86	72.46



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3. Communication System

Summary:



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	1.31	1.39	1.45	1.53	1.61
Substation	59.06	62.16	65.42	68.86	72.46
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	60.37	63.55	66.87	70.39	74.07
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	60.37	63.55	66.87	70.39	74.07

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(Petitioner)



Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S		
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I		
Region	Western Region	DOCOC Date	Jun 26, 2014

(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

(Petitioner)



Calculation of ROE

Form No. - 8

Name of the Transmission Licensee		Power Grid Corporation of India Limited			
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S				
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I				
Region	Western Region	DOCO Date	Jun 26, 2014		

(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	144.75	144.75	144.75	144.75	144.75
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)	144.75	144.75	144.75	144.75	144.75
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	144.75	144.75	144.75	144.75	144.75
Average Normative Equity	144.75	144.75	144.75	144.75	144.75
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	27.19	27.19	27.19	27.19	27.19
Return on Equity	27.19	27.19	27.19	27.19	27.19



Calculation of WAR of interest on actual loan

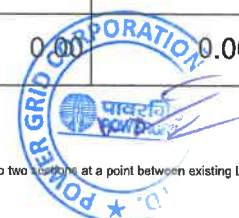
Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S			
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I			
Region	Western Region	DOC Date	Jun 26, 2014	

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
BOND XXXVII -LOAN-1					
Gross Loan- Opening	50.00	50.00	50.00	50.00	50.00
Cumulative repayments of Loans upto previous year	37.50	41.67	45.83	50.00	50.00
Net loan-Opening	12.50	8.33	4.17	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	4.17	4.17	4.17	0.00	0.00
Net Loan-Closing	8.33	4.16	0.00	0.00	0.00
Average Net Loan	10.42	6.25	2.09	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	0.9639	0.5781	0.1933	0.00	0.00

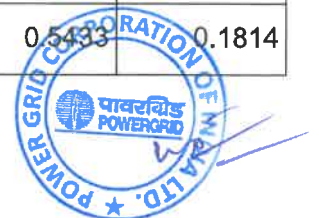
BOND XL -LOAN-2					
Gross Loan- Opening	39.64	39.64	39.64	39.64	39.64
Cumulative repayments of Loans upto previous year	26.43	29.73	33.03	36.34	39.64
Net loan-Opening	13.21	9.91	6.61	3.30	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	3.30	3.30	3.30	3.30	0.00
Net Loan-Closing	9.91	6.61	3.31	0.00	0.00



Average Net Loan	11.56	8.26	4.96	1.65	0.00
Rate of Interest on Loan on Annual Basis	9.30	9.30	9.30	9.30	9.30
Interest on loan	1.0751	0.7682	0.4613	0.1535	0.00

BOND - XLI -LOAN-3					
Gross Loan- Opening	103.00	103.00	103.00	103.00	103.00
Cumulative repayments of Loans upto previous year	68.67	77.25	85.83	94.42	103.00
Net loan-Opening	34.33	25.75	17.17	8.58	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	8.58	8.58	8.58	8.58	0.00
Net Loan-Closing	25.75	17.17	8.59	0.00	0.00
Average Net Loan	30.04	21.46	12.88	4.29	0.00
Rate of Interest on Loan on Annual Basis	8.85	8.85	8.85	8.85	8.85
Interest on loan	2.6585	1.8992	1.1399	0.3797	0.00

BOND - XLV -DOCO					
Gross Loan- Opening	45.00	45.00	45.00	45.00	45.00
Cumulative repayments of Loans upto previous year	26.25	30.00	33.75	37.50	41.25
Net loan-Opening	18.75	15.00	11.25	7.50	3.75
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	3.75	3.75	3.75	3.75	3.75
Net Loan-Closing	15.00	11.25	7.50	3.75	0.00
Average Net Loan	16.88	13.13	9.38	5.63	1.88
Rate of Interest on Loan on Annual Basis	9.65	9.65	9.65	9.65	9.65
Interest on loan	1.6289	1.267	0.9052	0.5433	0.1814



SBI (2014-15) -ADDCAP 2017-18					
Gross Loan- Opening	1.14	1.14	1.14	1.14	1.14
Cumulative repayments of Loans upto previous year	0.57	0.68	0.80	0.91	1.03
Net loan-Opening	0.57	0.46	0.34	0.23	0.11
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.11	0.11	0.11	0.11	0.11
Net Loan-Closing	0.46	0.35	0.23	0.12	0.00
Average Net Loan	0.52	0.41	0.29	0.18	0.06
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.0426	0.0336	0.0238	0.0148	0.0049

SBI (2014-15) -LOAN-4					
Gross Loan- Opening	29.76	29.76	29.76	29.76	29.76
Cumulative repayments of Loans upto previous year	14.88	17.86	20.83	23.81	26.78
Net loan-Opening	14.88	11.90	8.93	5.95	2.98
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	2.98	2.98	2.98	2.98	2.98
Net Loan-Closing	11.90	8.92	5.95	2.97	0.00
Average Net Loan	13.39	10.41	7.44	4.46	1.49
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	1.098	0.8536	0.6101	0.3657	0.1222

BOND XLVIII -ADDCAP 2014-15					
Gross Loan- Opening	4.68	4.68	4.68	4.68	4.68
Cumulative repayments of Loans upto previous year	2.34	3.51	3.51	3.51	3.51
Net loan-Opening	2.34	1.17	1.17	1.17	1.17



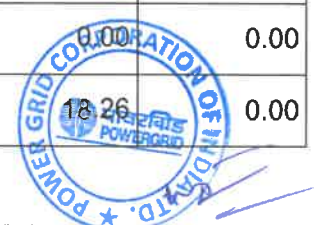
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	1.17	0.00	0.00	0.00	0.00
Net Loan-Closing	1.17	1.17	1.17	1.17	1.17
Average Net Loan	1.76	1.17	1.17	1.17	1.17
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.1443	0.0959	0.0959	0.0959	0.0959

BOND 59 -ADD CAP 2017-18

Gross Loan- Opening	28.06	28.06	28.06	28.06	28.06
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	28.06
Net loan-Opening	28.06	28.06	28.06	28.06	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	28.06	0.00
Net Loan-Closing	28.06	28.06	28.06	0.00	0.00
Average Net Loan	28.06	28.06	28.06	14.03	0.00
Rate of Interest on Loan on Annual Basis	7.30	7.30	7.30	7.30	7.30
Interest on loan	2.0484	2.0484	2.0484	1.0242	0.00

BOND60 (LX) -ADD CAP 2017-18

Gross Loan- Opening	36.52	36.52	36.52	36.52	36.52
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	36.52
Net loan-Opening	36.52	36.52	36.52	36.52	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	36.52	0.00
Net Loan-Closing	36.52	36.52	36.52	0.00	0.00
Average Net Loan	36.52	36.52	36.52	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	2.6294	2.6294	2.6294	1.3147	0.00

Summary

Gross Loan- Opening	337.80	337.80	337.80	337.80	337.80
Cumulative repayments of Loans upto previous year	176.64	200.70	223.58	246.49	329.79
Net loan-Opening	161.16	137.10	114.22	91.31	8.01
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	24.06	22.89	22.89	83.30	6.84
Net Loan-Closing	137.10	114.21	91.33	8.01	1.17
Average Net Loan	149.15	125.67	102.79	49.67	4.60
Rate of Interest on Loan on Annual Basis	8.2394	8.0953	7.8872	7.8353	8.7913
Interest on loan	12.2891	10.1734	8.1073	3.8918	0.4044



Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S		
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I		
Region	Western Region	DOCO Date	Jun 26, 2014

(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	337.80	337.80	337.80	337.80	337.80
Cumulative repayments of Normative loan upto previous year	233.02	259.85	286.41	311.00	318.25
Net normative loan-Opening	104.78	77.95	51.39	26.80	19.55
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	26.83	26.56	24.59	7.25	7.25
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	77.95	51.39	26.80	19.55	12.30
Average normative loan	91.37	64.67	39.10	23.18	15.93
Weighted Average Rate of interest on actual loan	8.2394	8.0953	7.8872	7.8353	8.7913
Interest on normative loan	7.53	5.24	3.08	1.82	1.40
Pro rata interest on normative loan	7.53	5.24	3.08	1.82	1.40

(Petitioner)



Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S		
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I		
Region	Western Region	DOC Date	Jun 26, 2014

(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	5.39	0.00	5.39	5.39	3.34	0.18
Transmission Line	283.27	0.00	283.27	283.27	5.28	14.96
Sub Station	178.96	0.00	178.96	178.96	5.28	9.45
Comm. Sys. excluding Fiber Optic	14.93	0.00	14.93	14.93	15.00	2.24
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	0.00	0.00	0.00	0.00	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	482.55	0.00	482.55	482.55	0.00	26.83
Weighted Average Rate of Depreciation(%)					5.560046	

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



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Civil & Building	5.39	0.00	5.39	5.39	3.34	0.18
Transmission Line	283.27	0.00	283.27	283.27	5.28	14.96
Sub Station	178.96	0.00	178.96	178.96	5.28	9.45
Comm. Sys. excluding Fiber Optic	14.93	0.00	14.93	14.93	15.00	1.97
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	0.00	0.00	0.00	0.00	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	482.55	0.00	482.55	482.55	0.00	26.56
Weighted Average Rate of Depreciation(%)					5.504093	

2026-27						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	5.39	0.00	5.39	5.39	3.34	0.18
Transmission Line	283.27	0.00	283.27	283.27	5.28	14.96
Sub Station	178.96	0.00	178.96	178.96	5.28	9.45
Comm. Sys. excluding Fiber Optic	14.93	0.00	14.93	14.93	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	0.00	0.00	0.00	0.00	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	482.55	0.00	482.55	482.55	0.00	24.59
Weighted Average Rate of Depreciation(%)					5.095845	



2027-28						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	5.39	0.00	5.39	5.39	3.34	0.15
Transmission Line	283.27	0.00	283.27	283.27	5.28	4.72
Sub Station	178.96	0.00	178.96	178.96	5.28	2.38
Comm. Sys. excluding Fiber Optic	14.93	0.00	14.93	14.93	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	0.00	0.00	0.00	0.00	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	482.55	0.00	482.55	482.55	0.00	7.25
Weighted Average Rate of Depreciation(%)					1.502435	

2028-29						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	5.39	0.00	5.39	5.39	3.34	0.15
Transmission Line	283.27	0.00	283.27	283.27	5.28	4.72
Sub Station	178.96	0.00	178.96	178.96	5.28	2.38
Comm. Sys. excluding Fiber Optic	14.93	0.00	14.93	14.93	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	0.00	0.00	0.00	0.00	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	482.55	0.00	482.55	482.55	0.00	7.25



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Weighted Average Rate of Depreciation(%)					1.502435	
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(Petitioner)



Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S				
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I				
Region	Western Region	DOC Date	Jun 26, 2014		

(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	29.00	29.00	29.00	29.00	29.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	9.00	10.00	11.00	12.00	13.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	20.00	19.00	18.00	17.00	16.00
Capital Base					
1.4 Opening capital cost	482.55	482.55	482.55	482.55	482.55
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	482.55	482.55	482.55	482.55	482.55
1.8 Average capital cost	482.55	482.55	482.55	482.55	482.55
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	0.00	0.00	0.00	0.00	0.00
1.11 Asset having 10% salvage value included in 1.8	482.55	482.55	482.55	482.55	482.55
1.12 Depreciable Value(1.10+90% of 1.11)	434.29	434.29	434.29	434.29	434.29
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	5.560046	5.504093	5.095845	1.502435	1.502435



1.14 Depreciation(for the period)	26.83	26.56	24.59	7.25	7.25
1.15 Depreciation(Annualised)	26.83	26.56	24.59	7.25	7.25
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	233.01	259.84	286.40	310.99	318.24
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	259.84	286.40	310.99	318.24	325.49

WZ

(Petitioner)



Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Split Bus arrangement and reconfiguration/shifting of terminating lines at Raipur 400 kV S/S				
Element Description	Splitting of 400 kV Raipur Bus through Bus Sectionalizer into two sections at a point between existing Line bays of Chandrapur-I				
Region	Western Region	DOCOC Date	Jun 26, 2014		

(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	5.03	5.30	5.57	5.87	6.17
Maintenance spares 15% of O&M Expenses	9.06	9.53	10.03	10.56	11.11
Receivables equivalent to 45 days of AFC	15.47	15.55	15.46	13.55	14.01
Total Working capital	29.56	30.38	31.06	29.98	31.29
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	3.52	3.62	3.70	3.57	3.72
Pro rata interest on working capital	3.52	3.62	3.70	3.57	3.72



**Summary of issue involved
in the petition**

**PART-III
FORM- 15**

1. Name of the Petitioner	Power Grid Corporation of India Limited			
2. Petition Category	Transmission			
3. Tariff Period	2019-24 and 2024-29			
4. Name of the Project	Split Bus Arrangement and Reconfiguration/Shifting of Terminating Lines at Raipur 400 kV Sub-station			
5. Investment Approval date	-			
6. SCOD of the Project	-			
7. Actual COD of the project	-			
8. Whether entire scope is covered in the present petition.	Yes			
9. No. of Assets covered in instant petition	1			
10. No. of Assets having time over run	-			
11. Estimated Project Cost as per IA	1024.96			
12. Is there any RCE? if so, provide the date	no			
13. Revised Estimated Project Cost (if any)	-			
14. Completion cost for all the assets covered in the instant petition.	482.55			
15. No. of Assets covered in instant petition and having cost overrun.	-			
16	Prayer in brief			
17	Key details and any Specific issue involved			
18	Respondents			
	Name of Respondents			
	1	MADHYA PRADESH POWER MANAGEMENT COMPANY LTD	7	DNH and DD Power Corporation Ltd
	2	Madhya Pradesh Power Transmission Company Limited	8	Maharashtra State Electricity Transmission Company Limited
	3	Madhya Pradesh Industrial Development Corporation	9	Chattisgarh State Power Transmission Company Limited
	4	MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.	10	CHHATTISGARH STATE POWER DISTRIBUTION CO. LTD
	5	GUJARAT URJA VIKAS NIGAM LTD.		
	6	ELECTRICITY DEPARTMENT, GOA		

(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	✓
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.	Yes
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	N.A.
6	Copies of the BFTA/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>		

