BEFORE

THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No/TT/	
IN THE MATTER OF: -	
Subject matter: Petition for truing up of Transmission tariff for 2019-24 and determination	
of transmission tariff for 2024-29 tariff block for assets under "Western Region System	
Strengthening Scheme-XIII (WRSS-XIII)" 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)	
Regulation 2024.	
Power Grid Corporation of India LtdPetitioner 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)

BEFORE

THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

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IN THE MATTER OF:-

Subject matter: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for assets under "Western Region System Strengthening Scheme-XIII (WRSS-XIII)" 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) Regulation 2024.

Power Grid Corporation of India Ltd.

--- PETITIONER

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Madhya Pradesh Power Management Company

---- RESPONDENTS

Limited,

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: OSTOBLAY

REPRESENTED BY

Zafrul Hasan

General Manager (Commercial)



BEFORE

THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

IN THE MATTER OF:

Subject matter: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for assets under "Western Region System Strengthening Scheme-XIII (WRSS-XIII)" 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) Regulation 2024.

Power Grid Corporation of India Ltd.

Registered office: B-9, Qutab Institutional Area,

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Corporate Centre: 'SAUDAMINI', Plot No-2,

Sector-29, Gurgaon-122 001 (Haryana).

Madhya Pradesh Power Management Company Limited.

---- RESPONDENTS

Shakti Bhawan, Rampur, Jabalpur – 482 008. 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 Condition of Tariff Regulatory 2019 and

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

GURGAON FILED BY

DATED: - 0 50 8 24

POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

Zafrul Hasan

General Manager (Commercial)

BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

PETITION	NO.:
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IN THE MATTER OF: Subject matter: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for assets under "Western Region System Strengthening Scheme-XIII (WRSS-XIII)" 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) Regulation 2024.

Power Grid Corporation of India Ltd.

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Madhya Pradesh Power Management Company

---- RESPONDENTS

Limited.

Shakti Bhawan, Rampur, Jabalpur - 482 008.

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.
- 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 Laod Dispatch Building Dangania, Raipur- 492013.
- 10. Chhattisgarh State Power Distribution Company Limited, P.O.Sunder Nagar, Dangania, Raipur, Chhattisgarh 492013.

PETITIONER

POWER GRID CORPORATION OF INDIA LTD.

GURGAON

DATED: 0 Stog 24

REPRESENTED BY

Zafrul Hasan General Manager Commercial)

BEFORE

THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. ---/TT/----

IN THE MATTER OF: Subject matter: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for assets under "Western Region System Strengthening Scheme-XIII (WRSS-XIII)" 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) Regulation 2024.

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Madhya Pradesh Power Management Company Limited, Shakti Bhawan, Rampur, Jabalpur – 482 008. 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 thisday of August 2024.

PETITIONER

POWER GRID CORPORATION OF INDIA LTD.

GURGAON
DATED:- OSTO 9/24

Zafrul Hasan General Manager (Commercial)



BEFORE

THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

		110		
PETITI	ON	NO.:	200	

IN THE MATTER OF: Subject matter: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for assets under "Western Region System Strengthening Scheme-XIII (WRSS-XIII)" 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) Regulation 2024.

Power Grid Corporation of India Ltd.

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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, 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 Central Commission"). Tariff for the transmission system established by POWERGRID is required to be attempted by

this Hon'ble Central Commission in accordance with the Tariff Regulations as notified by this Hon'ble Central Commission in exercise of its powers under Section 178 of the Electricity Act, 2003.

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

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

(iii) Background of Transmission Assets:

2. POWERGRID has filed the present petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for the following Assets which are implemented under ""Western Region System Strengthening Scheme-XIII (WRSS-XIII)" for the following:

Asset No	Asset Name	DOCO	Remarks
Asset	Bachau-Varsana (GETCO) 400 kV D/C Transmission Line along with extension of 400 kV Bachau Sub- station and extension of 400 kV Varsana (GETCO) Sub-station	08.01.2015	Approved vide order dated 01.02.2021 in petition no. 196/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 cis claimed capital cost as on 31.03.2019 and additional capital expenditure during 2019-24 and 2024-29 tariff block is as under:

Rs in lakhs

Asset No.	Approved Cost as per FR	Approved cost as per RCE	Expenditure Up to DOCO /31.03.2019	Expenditure during 2019-24 tariff block 2019-24	Actual Cost as on 31.03.2024
Asset	4993.00	6436.00	5168.16	No add cap	5168.16

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 2024-29	Estimated completion Cost as on 31.03.2029
Asset	4993.00	6436.00	5168.16	No add cap	5168.16

- 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
	AFC approved	933.68	911.9	892.31	872.86	853.46
Asset	Revised AFC					
	based on truing up	933.37	910.48	889.82	871.07	854.48

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	. 792.6	772.45	748.26	543.95 RA	65,65

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, maintain and operate an efficient, coordinated and economical interstate transmission system (ISTS). The tariff for the said transmission systems shall be determined by the Hon'ble Central Commission in accordance with the Tariff Regulations, 2019 and 2024.
- 9. That the subject project/petition covers approval of transmission tariff for following Asset:

Asset Name	DOCO	Remarks
Bachau-Varsana (GETCO) 400		Earlier covered under
kV D/C Transmission Line along		petition no.
with extension of 400 kV Bachau	08.01.2015	196/TT/2020 now
Sub-station and extension of 400		covered under
kV Varsana (GETCO) Sub-station		instant petition
	Bachau-Varsana (GETCO) 400 kV D/C Transmission Line along with extension of 400 kV Bachau Sub-station and extension of 400	Bachau-Varsana (GETCO) 400 kV D/C Transmission Line along with extension of 400 kV Bachau Sub-station and extension of 400

10. Cost detail:

The capital cost of Rs. 5168.16 Lakhs for subject Asset has been admitted by Hon'ble commission vide order dated 01.02.2021 in petition no. 196/TT/2020. Copy of order is enclosed as **EncI-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. <u>Transmission tariff:</u>

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 the above up ROE rate.

While filing Tariff petition for 2019-24 period, the petitioner had prayed for allowing the floating rate of Interest on Ioan 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
Combin	AFC approved	933.68	911.9	892.31	872.86	853.46
ed	Revised AFC					
Asset	based on truing up	933.37	910.48	889.82	871.07	854.48

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

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

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



Project		2024-25	2025-26	2026-27	2027-28	2028-29
Asset	AFC	792.6	772.45	748.26	543.95	545.65

Tariff Filing Formats along with the other relevant information and supporting documentation are attached hereto as **Enc!-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 meading 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 at the end of tariff block.

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



g) 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.

h) 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.

i) 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.

j) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a

separate petition as mentioned at para 20 above.

k) 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

FILED BY

GURGAON

DATED: - 05/08/24

POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

Zafrul Hasan

General Manager (COMMERCIAL)

BEFORE

THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

DET	ITIC	1.0	IN ILLOWS			
PET	1 1 17	N IN I	DIC 3	•		

IN THE MATTER OF: Subject matter: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for assets under "Western Region System Strengthening Scheme-XIII (WRSS-XIII)" 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) Regulation 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

--- RESPONDENT

Limited.

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.

NOTA

- 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

(DEPONENT)

VERIFICATION

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

(DEPONENT)

ATTESTED

MAHENDER S. PUNIA ADVOCATE & NOTARY Distt. Gurugram (Haryana) India 05/08/24

NOTAP Mahenlier S. Puniu Regn No. 3999



पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड

POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)

पावर ग्रिड कॉरपोरेशन ऑफ इन्डिया 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)

Mukesh Khanna

ED (Commercial &RC)

केन्द्रीय कार्यालय : "सौदामिनी" प्लॉट सं. २, सैक्टर-29, गुरुग्राम-122001, (हरियाणा), दूरमाष : 0124-2571700-719 Corporate Office : "Saudamini", Plot No. 2, Sector-29, Gurugram-122001, (Haryana) Tel. : 0124-2571700-719

पंजीकृत कार्यालय : बी-म, कुतुब इस्टीद्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016 011-26560112, 26564812, 26564812, 26564892, सीआईएन : Lab 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. 196/TT/2020

Coram:

Shri P. K. Pujari, Chairperson Shri I. S. Jha, Member Shri Arun Goyal, Member

Date of Order : 01.02.2021

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 the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2019 of Bachau-Varsana (GETCO) 400 kV D/C Transmission Line along with extension of 400 kV Bachau Sub-station and extension of 400 kV Varsana (GETCO) Sub-station under Western Region System Strengthening Scheme-XIII (WRSS-XIII).

And in the Matter of:

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

.....Petitioner

- 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.
 - 4. Maharashtra State Electricity Distribution Co. Ltd., Hongkong Bank Building, 3rd Floor, M.G. Road, Fort, Mumbai-400001:

ATTESTED TRUE COPY Page No. 25-63 Authorised Signatory Power Grid Corporation of India Ltd Plot No. ? Sentor 20 Gurna-



Order in Petition No.196/TT/2020



- Maharashtra State Electricity Transmission Co. Ltd., Prakashganga, 6th Floor, Plot No. C-19, E-Block, Bandra Kurla Complex, Bandra (East) Mumbai-400 051.
- Gujarat Urja Vikas Nigam Ltd., Sardar Patel Vidyut Bhawan, Race course Road. Vadodara-390 007
- 7. Electricity Department, Government of Goa, Vidyut Bhawan, Panaji, Near Mandvi Hotel, Goa-403001.
- 8. Electricity Department, Administration of Daman & Diu, Daman-396210.
- DNH Power Distribution Corporation Ltd.,
 Vidyut Bhawan, 66kV Road, Near Secretariat Amli,
 Silvassa-396230.
- Chhattisgarh State Power Transmission Co. Ltd., State Load Despacth Building, Dangania, Raipur-492013.
- Chhattisgarh State Power Distribution Co. Ltd.,
 P.O. Sunder Nagar, Dangania, Raipur,
 Chhattisgarh-492013.

...Respondents

For Petitioner

Shri S. S. Raju, PGCIL Shri A. K. Verma, PGCIL Shri B. Dash, PGCIL

For Respondents:

None

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as "the Petitioner"), a deemed transmission licensee, for truing up of the tariff of the period from COD to 31.3.2019 under Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and for determination of the tariff of the period from 1.4.2019 to 31.3.2024 under Regulation 8 of the Central

Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of Bachau-Varsana (GETCO) 400 kV D/C Transmission Line along with extension of 400 kV Bachau Sub-station and extension of 400 kV Varsana (GETCO) Sub-station under Western Region System Strengthening Scheme-XIII (WRSS-XIII) (hereinafter referred to as 'the transmission project'):

- 2. The Petitioner has made the following prayers in this petition:
 - 1) "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 12.2 and 13.1 above.
 - 2) Allow the addcap for 2014-19 tariff block as claimed as per Para 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 the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 8 and 9 above for respective block.

4)

- (a) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
- (b) Further it is submitted that deferred tax liability before 01.04.2009 shall be recoverable from the beneficiaries or long term customers / DIC as the case may be, as and when the same is materialized as per regulation 49 of 2014 and regulation 67 of 2019 tariff regulation. The petitioner may be allow to recover the deferred tax liability materialised directly without making any application before the commission as provided in the regulation.
- 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents 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 respondents.
- 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 12.1 above.



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

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

Background

- 3. The brief facts of the case are as under:
 - The Investment Approval (IA) for the transmission project was accorded a) by the Board of Directors of the Petitioner Company vide Memorandum No. C/CP/WRSS/XIII dated 12.12.2011 at an estimated cost of ₹4993 lakh including an IDC of ₹194 lakh. Further, RCE for the transmission project was approved by the Board of Directors of the Petitioner Company vide Memorandum No. C/CP/RCE/RCE-WRSS-XIII dated 11.3.2016 at an estimated cost of ₹6436 lakh including an IDC of ₹297 lakh.
 - The tariff of the transmission asset for the 2014-19 tariff period was b) determined vide order dated 22.3.2016 in Petition No. 413/TT/2014. The scope of work covered under the transmission project i.e. "Western Region System Strengthening Scheme-XIII (WRSS-XIII)" is as under:

a. <u>Transmission Lines</u>:

Bachau-Varsana (GETCO) 400 kV D/C Line

b. Sub-stations:

- Extension of 400 kV Bachau Sub-station
- Extension of 400 kV Varsana (GETCO) Sub-station
- The transmission asset was scheduled to be put into commercial c) operation on 11.9.2013 and it was put into commercial operation on 8.1.2015. Thus, there was time over-run of 484 days.
- The trued up transmission tariff claimed by the Petitioner for the 2014-19 d) tariff period is as under:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges approved vide order dated 22.3.2016 in Petition No. 413/TT/2014	245.16	1185.06	1297.09	1299.00	1279.56
Claimed by the Petitioner based on truing up in the instant Petition	250.96	1124.08	1153.06	1145.74	1133.39

- 4. The Respondents are distribution licensees, transmission licensees and power departments, who are procuring transmission services from the Petitioner, mainly beneficiaries of the Western Region.
- 5. The Petitioner has served the petition on the Respondents and notice of this petition has been published in newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in newspaper by the Petitioner. Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No.1, has filed its reply vide affidavit dated 22.2.2020. The Petitioner vide affidavit dated 5.8.2020 has filed rejoinder to the reply of MPPMCL submitting that the reply does not refer to the asset covered under the instant petition. This aspect was highlighted by the representative of the Petitioner during the hearing on 10.8.2020. We have also gone through the reply filed by MPPMCL and it is noticed that the asset mentioned in the affidavit dated 22.2.2020 is not covered in the instant petition. Therefore, the said affidavit of MPPMCL is not considered in this order.
- 6. This order is issued considering the submissions made in the Petition dated 9.10.2019 and affidavits dated 4.6.2020 and 1.9.2020.

- 7. The hearing in this matter was held on 10.8.2020 through video conference and the order was reserved.
- 8. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.

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

9. The details of the trued-up transmission charges claimed by the Petitioner in respect of the transmission asset are as under:

(₹ in lakh)

				1
2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
56.93	263.21	276.72	279.76	280.60
64.72	285.43	276.51	253.85	229.83
61.53	286.18	301.16	304.56	306.34
7.33	33.36	34.28	34.39	34.40
56.33	255.98	264.48	273.27	282.31
246.84	1124.16	1153.15	1145.83	1133.48
	(Pro-rata for 83 days) 56.93 64.72 61.53 7.33 56.33	(Pro-rata for 83 days) 2015-16 56.93 263.21 64.72 285.43 61.53 286.18 7.33 33.36 56.33 255.98	(Pro-rata for 83 days) 2015-16 2016-17 56.93 263.21 276.72 64.72 285.43 276.51 61.53 286.18 301.16 7.33 33.36 34.28 56.33 255.98 264.48	(Pro-rata for 83 days) 2015-16 2016-17 2017-18 56.93 263.21 276.72 279.76 64.72 285.43 276.51 253.85 61.53 286.18 301.16 304.56 7.33 33.36 34.28 34.39 56.33 255.98 264.48 273.27

10. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission asset are as under:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
O&M Expenses	20.64	21.33	22.04	22.77	23.53
Maintenance Spares	37.16	38.40	39.67	40.99	42.35
Receivables	180.91	187.36	192.19	190.97	188.91
Total Working Capital	238.71	247.09	253.90	254.73	254.79
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	32.23	33.36	34.28	34.39	34.40

Capital Cost

11. The Commission vide order dated 22.3.2016 in Petition No. 413/TT/2014 allowed the capital cost of ₹6086.34 lakh as on 31.3.2019 for the transmission asset.



12. The details of FR approved capital cost, actual expenditure upto COD, and Additional Capital Expenditure (ACE) incurred during the 2014-19 period claimed by the Petitioner are as under:

(₹ in lakh)

Approved Capital Cost	Actual Capital Cost	Actual A	Actual Additional Capital Expenditure (ACE)			
(RCE)	as on COD	2014-15	2015-16	2016-17	2017-18	31.3.2019
6436.00	4581.95	55.77	415.55	82.59	32.29	5168.15

13. We have considered the submissions of the Petitioner and it is observed that the estimated completion cost of the transmission asset as on 31.3.2019 including ACE is within the approved capital cost. Therefore, there is no cost over-run.

Time over-run

14. There is time over-run of 484 days and the Commission vide order dated 22.3.2016 in Petition No. 413/TT/2014 held that the time over-run in respect of the transmission asset was beyond the control of the Petitioner and the same was condoned.

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

15. The Petitioner has claimed IDC for the transmission asset as approved by Commission in order dated 22.3.2016 and has submitted the statement showing IDC claim, discharge of IDC liability as on COD and thereafter as under:

(₹ in lakh)

IDC as per Auditor's Certificate	IDC discharged upto COD	IDC discharged during 2015-16
297.32	283.51	13.81

16. The Petitioner vide affidavit dated 1.9.2020 has submitted that for the purpose of financing of the transmission projects, fund requirement is anticipated for next two



to three months and accordingly funds are raised based on pooled requirements. The Petitioner has further submitted that funds are earmarked to a particular project/ element based on the actual cash outflow for the project/ element. Accordingly, the IDC is allocated to the projects/ elements in proportion to the loan earmarked from the entire loan to that project/ element.

- 17. The allowable IDC has been worked out considering the information submitted by the Petitioner for the transmission asset separately on cash basis. The loan details submitted in Form-9C for 2014-19 tariff period and the IDC computation sheet have been considered for the purpose of IDC calculation on cash and on accrued basis.
- 18. The Petitioner has also claimed IEDC of ₹68.18 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. Hence, the IEDC claimed 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 plant and machinery cost up to the 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%

GIS Sub-station: 5.00%"

20. The Initial Spares claimed by the Petitioner are as under:

Particulars	P&M cost as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Initial Spares worked out by the Petitioner (₹ in lakh)	Ceiling Limit (%)
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Particulars	P&M cost as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Initial Spares worked out by the Petitioner (₹ in lakh)	Ceiling Limit (%)
Sub-station	2084.44	92.73	127.13	6

- 21. The Petitioner has claimed Initial Spares for only the sub-station portion of the transmission asset and has not claimed any Initial Spares for transmission line. The Petitioner has also submitted that the capital cost as on COD includes only the discharged portion of the Initial Spares. The initial spares claimed are within the permissible ceiling.
- 22. We have considered the submissions of the Petitioner. The details of Initial Spares allowed for the 2014-19 tariff period is as under:

Particulars	Estimated Completion Cost (A) (₹ in lakh)	Initial Spares Claimed (B) (₹in lakh)	Ceiling Limit (%) (C)	Initial Spares Worked out (₹ in lakh) D = [(A-B)*C /(100-C)]	Initial Spares Approved (₹ in lakh)	Excess Initial Spares
Sub-station	2084.44	92.73	6.0	127.13	92.73	0.00

Capital Cost as on COD

23. Accordingly, the capital cost allowed as on COD is summarized as under:

(₹ in lakh)

Capital Cost claimed as on COD (A)	Less: Un- discharged IDC as on COD (B)	Un- discharged Initial Spares as on COD (C)	Excess Initial Spares disallowed (D)	Capital Cost allowed as on COD (E) = (A-B- C-D)
4581.95	13.81	0.00	0.00	4568.14

Additional Capital Expenditure (ACE)

24. The Petitioner has claimed following ACE during the 2014-19 tariff period based on the actual expenditure:



(₹ in lakh)

Approved	proved Approved Expenditure			ACE (as per Auditor's certificate)				
cost as per FR	cost as per RCE	up to COD	2014-15	2015-16	2016-17	2017-18	Cost as on 31.3.2019	
4992.86	6436.00	4581.95	55.77	415.55	82.59	32.29	5168.15	

- 25. The Petitioner has submitted that ACE pertains to balance and retention payments and discharge of IDC liability. The Petitioner has claimed ACE of ₹600.02 lakh during the 2014-19 period against the approved ACE of ₹1518.20 lakh.
- 26. The Petitioner in the instant petition has also submitted that ACE upto 31.3.2019 has been considered in the Auditor's Certificate as per actuals. The contract wise details submitted by the Petitioner are as follows:

(₹ in lakh)

Year of Actual			Discharge of Payment				
Capitalization	Party	Particulars	2014-15	2015-16	2016-17	2017-18	Total (2014-19)
Unexecuted Wo	rk						
2014-15	Crop Compensation		36.09				36.09
2014-15	Police Protection			21.59			21.59
2014-15	L&T	S/S LOA 456	19.68				19.68
2014-15	L&T	TL LOA 4060		147.98	25.92		173.90
2014-15	KEC International			26.33			26.33
Discharge of Lia	bility	·					
2014-15	L&T	S/S LOA 456		181.62	27.50	30.49	239.61
2014-15	KEC International	TL LOA 4060		38.03	29.17	1.8	69.00
Total			55.77	415.55	82.59	32.29	600.02

27. The ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i) and (ii) of the 2014 Tariff Regulations as it is towards balance and retention payments. The un-discharged IDC liability as on COD has been allowed as ACE during the year of its discharge. The allowed ACE from COD to 31.3.2019 in respect of the transmission asset is summarized as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	Total
ACE	55.77	415.55	82.59	32.29	586.20
Un-discharged IDC	_	13.82	-	-	13.82
Total ACE	55.77	429.37	82.59	32.29	600.02

28. Accordingly, the capital cost as on COD, ACE for 2014-19 period and capital cost as on 31.3.2019 considered for truing up of the tariff of the 2014-19 period is as under:

(₹ in lakh)

Admitted Capital Cost	Addit	Total Capital Cost as on			
as on COD	2014-15	2015-16	2016-17	2017-18	31.3.2019
4568.14	55.77	429.37	82.59	32.29	5168.16

Debt-Equity ratio

29. The Petitioner has claimed the Debt-Equity ratio of 70:30 as on the date of commercial operation. Debt-Equity ratio of 70:30 is considered as provided in Regulation 19 of the 2014 Tariff Regulations. The details of Debt-Equity ratio in respect of the transmission asset as on the date of commercial operation and as on 31.3.2019 is as under:

Particulars	Capital Co		Capital Cost as on 31.3.2019		
	Amount (₹ in lakh)	%	Amount (₹ in lakh)	%	
Debt	3197.7	70.00	3617.71	70.00	
Equity	1370.44	30.00	1550.45	30.00	
Total	4568.14	100.00	5168.16	100.00	

Interest on Loan (IoL)

30. The Petitioner has claimed IoL based on actual interest rates for each year during the 2014-19 period. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2019 for respective loans. We have considered the submissions of the Petitioner. IoL is allowed based on actual interest rate, in accordance with

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Regulation 26 of the 2014 Tariff Regulations. IoL has been worked out as detailed below:

- (i) Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition.
- (ii) The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period.
- The details of loL allowed are as under: 31.

(₹ in lakh)

Particulars	2014-15 (Pro- rata for 83 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	3197.70	3236.74	3537.30	3595.11	3617.71
Cumulative Repayments upto Previous Year	0.00	55.32	311.38	580.96	853.58
Net Loan-Opening	3197.70	3181.42	3225.92	3014.15	2764.13
Additions	39.04	300.56	57.81	22.60	0.00
Repayment during the year	55.32	256.07	269.58	272.62	273.47
Net Loan-Closing	3181.42	3225.92	3014.15	2764.13	2490.67
Average Loan	3189.56	3203.67	3120.03	2889.14	2627.40
Weighted Average Rate of Interest on Loan (%)	8.93	8.92	8.90	8.85	8.84
Interest on Loan	64.73	285.85	277.59	255.57	232.18

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.3.2016 in Petition No. 413/TT/2014	64.73	309.52	328.64	307.88	279.56
Claimed by the Petitioner in the instant petition	64.72	285.43	276.51	253.85	229.83
Allowed after true-up in this order	64.73	285.85	277.59	255.57	232.18

Return on Equity (RoE)

The Petitioner is entitled to RoE for the transmission asset in accordance with 32. Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed the following effective tax rates for the 2014-19 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

33. 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 115 JB of the IT Act, 1961. The Section 115 JB (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

34. 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 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.

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

35. The Petitioner has claimed RoE for the 2014-19 period after grossing up the RoE of 15.50% with Effective Tax rates (based on MAT rates) each year. RoE is trued up on the basis of the MAT rate applicable in the respective years and is allowed as under:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
Opening Equity	1370.44	1387.17	1515.98	1540.76	1550.45
Additions	16.73	128.81	24.78	9.69	0.00
Closing Equity	1387.17	1515.98	1540.76	1550.45	1550.45
Average Equity	1378.81	1451.58	1528.37	1545.60	1550.45
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity	61.48	286.03	301.17	304.56	306.34

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.3.2016 in Petition No. 413/TT/2014	61.48	307.90	350.92	358.06	358.06
Claimed by the Petitioner in the instant petition	61.53	286.18	301.16	304.56	306.34
Allowed after true-up in this order	61.48	286.03	301.17	304.56	306.34

Depreciation

The Petitioner's claim towards depreciation in this petition was found to be 36. higher than the depreciation allowed vide order dated 22.3.2016 in Petition No.

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413/TT/2014. The Petitioner has neither given any justification for claiming higher depreciation than that was allowed earlier in order dated 22.3.2016 nor made any specific prayer for allowing higher depreciation in this petition. The Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions. Similar issue had come up in Petition No. 19/TT/2020 wherein the Commission vide order dated 9.5.2020 decided as under:

"31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012and 9.5.2013 in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim anv capital expenditure towards "IT Equipment" in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014-19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations (the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations."

37. In line with the above decision, the depreciation is considered @5.28% for IT Equipment as part of the sub-station while truing up the capital expenditure for the

2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 of the 2014 Tariff Regulations. The Gross Block during the 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD) (as placed in Annexure-1). WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during the 2014-19 period is as under:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	4568.14	4623.91	5053.28	5135.87	5168.16
Additional Capitalisation	55.77	429.37	82.59	32.29	0.00
Closing Gross Block	4623.91	5053.28	5135.87	5168.16	5168.16
Average Gross Block	4596.03	4838.60	5094.58	5152.02	5168.16
Freehold Land	-	-	-	-	-
Weighted Average Rate of Depreciation (WAROD) (%)	5.29	5.29	5.29	5.29	5.29
Balance useful life of the asset	30	29	28	27	26
Elapsed life	0	1	2	3	4
Aggregated Depreciable Value	4136.42	4354.74	4585.12	4636.81	4651.34
Combined Depreciation during the year	55.32	256.07	269.58	272.62	273.47
Cumulative Depreciation	55.32	311.38	580.96	853.58	1127.05
Remaining Aggregate Depreciable Value	4136.42	4299.42	4273.74	4055.85	3797.76

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.3.2016 in Petition No. 413/TT/2014	55.32	276.93	315.54	321.95	321.95
Claimed by the Petitioner in the instant petition	56.93	263.21	276.72	279.76	280.60
Allowed after true-up in this order	55.32	256.07	269.58	272.62	273.47

Operation & Maintenance Expenses (O&M Expenses)

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

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
Sub-station Bays					
400 kV Bay (AIS) at	2	2	2	2	2
Bhachau Sub-station					
400 kV Bay (AIS) at	2	2	2	2	2
Varsana Sub-station					
Norm (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
Total Sub-station O&M	241.20	249.20	257.48	266.04	274.84
Transmission Line					
400 kV D/C Bachau-	9.274	9.274	9.274	9.274	9.274
Versana Line (km)					
Norm (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806
Total transmission Line O&M	6.56	6.78	7.00	7.23	7.47
Total O&M Expenses	56.34	255.98	264.48	273.27	282.31

39. The O&M Expenses allowed vide order 22.3.2016 in Petition No. 413/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is shown in the table as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.3.2016 in Petition No. 413/TT/2014	56.34	255.98	264.48	273.27	282.31
Claimed by the Petitioner in the instant petition	56.33	255.98	264.48	273.27	282.31
Allowed after true-up in this order	56.34	255.98	264.48	273.27	282.31

Interest on Working Capital (IWC)

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

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(₹ in lakh)

Particulars	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
O&M Expenses	20.65	21.33	22.04	22.77	23.53
Maintenance Spares	37.16	38.40	39.67	40.99	42.35
Receivables	179.69	186.19	191.16	190.05	188.10
Total Working Capital	237.50	245.92	252.87	253.81	253.97
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of Working Capital	7.29	33.20	34.14	34.26	34.29

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.3.2016 in Petition No. 413/TT/2014	7.29	34.73	37.52	37.84	37.68
Claimed by the Petitioner in the instant petition	7.33	33.36	34.28	34.39	34.40
Allowed after true-up in this order	7.29	33.20	34.14	34.26	34.29

Approved Annual Fixed Charges for the 2014-19 Tariff Period

The trued up annual fixed charges of the transmission asset for the 2014-19 41. tariff period are as under:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	55.32	256.07	269.58	272.62	273.47
Interest on Loan	64.73	285.85	277.59	255.57	232.18
Return on Equity	61.48	286.03	301.17	304.56	306.34
Interest on Working Capital	7.29	33.20	34.14	34.26	34.29
O&M Expenses	56.34	255.98	264.48	273.27	282.31
Total	245.16	1117.13	1146.96	1140.28	1128.59

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Approved vide order dated 22.3.2016 in Petition No. 413/TT/2014	245.16	1185.06	1297.09	1299.00	1279.56	
Claimed by the Petitioner in the instant petition	246.84	1124.16	1153.15	1145.83	1133.48	
Allowed after true-up in this order	245.16	1117.13	1146.96	1140.28	1128.59	



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

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	280.60	280.60	274.45	269.58	269.58
Interest on Loan	204.75	179.49	155.34	131.62	108.05
Return on Equity	291.20	291.20	291.20	291.20	291.20
Interest on Working Capital	17.69	17.55	17.31	17.11	16.95
O&M Expenses	137.89	142.70	147.67	152.82	158.14
Total	932.13	911.54	885.97	862.33	843.92

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

(₹ in lakh)

					,
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	11.49	11.89	12.31	12.74	13.18
Maintenance Spares	20.68	21.41	22.15	22.92	23.72
Receivables	114.61	112.38	109.23	106.31	103.76
Total Working Capital	146.78	145.68	143.69	141.97	140.66
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest of Working Capital	17.69	17.55	17.31	17.11	16.95

Capital Cost as on 1.4.2019

- 44. 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

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the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

(c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;

(e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;

(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;

(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;

(h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;

(i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility:

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

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

(I) 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 trued up by excluding liability, if any, as on 1.4.2019;

(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these 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 inconformity with National R&R Policy and R&R package as approved; and (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti

Yojana (DDUGJY) project in the affected area.

- (5) The following shall be excluded from the capital cost of the existing and new projects:
- (a) The assets forming part of the project, but not in use, as declared in the tariff
- (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."
- The Petitioner vide affidavit dated 9.10.2019 has claimed capital cost of 45. ₹5168.15 lakh as on 31.3.2019 for the transmission asset. The capital cost of ₹5168.16 lakh as on 31.3.2019 for transmission asset has been worked out and the same has been considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (ACE)

46. The Petitioner has not claimed any ACE during the 2019-24 period.

Debt-Equity ratio

Regulation 18 of the 2019 Tariff Regulations provides as under: 47.



"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 ACE 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."



48. The details of the debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period for the transmission asset is as under:

Dantiaulana	Capital Cost as on 1.4.2019			
Particulars	Amount (₹ in lakh)	%	Amount (₹ in lakh)	%
Debt	3617.71	70.00	3617.71	70.00
Equity	1550.45	30.00	1550.45	30.00
Total	5168.16	100.00	5168.16	100.00

Return on Equity (RoE)

- 49. Regulations 30 and 31 of the 2019 Tariff Regulations provide 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 runof 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:

Rate of pre-tax return on equity = 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:

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."

50. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of RoE for the tariff period 2019-24, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the transmission asset is as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	1550.45	1550.45	1550.45	1550.45	1550.45
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	1550.45	1550.45	1550.45	1550.45	1550.45
Average Equity	1550.45	1550.45	1550.45	1550.45	1550.45
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable %	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	291.20	291.20	291.20	291.20	291.20

Interest on Loan (IoL)

- 51. 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 upto the date of de-capitalisation of such asset.
 - (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall

be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

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

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

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

- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- (7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing."
- The weighted average rate of IoL has been considered on the basis of rate 52. prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 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, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the transmission asset is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	3617.71	3617.71	3617.71	3617.71	3617.71
Cumulative Repayments upto Previous Year	1127.05	1407.66	1688.27	1968.88	2249.49
Net Loan-Opening	2490.67	2210.06	1929.45	1648.84	1368.23
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	280.61	280.61	280.61	280.61	280.61
Net Loan-Closing	2210.06	1929.45	1648.84	1368.23	1087.62
Average Loan	2350.36	2069.75	1789.14	1508.53	1227.92
Weighted Average Rate of Interest on Loan (%)	8.82	8.80	8.82	8.83	8.85
Interest on Loan	207.41	182.15	157.72	133.25	108.71



Depreciation

- 53. Regulation 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.

- (4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system:



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

- (6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.
- (7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.
- (8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized asset during its useful services."
- 54. IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD) (as placed in Annexure-2). WAROD has been worked out after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100 percent depreciable. 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 is as under:

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Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	5168.16	5168.16	5168.16	5168.16	5168.16
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	5168.16	5168.16	5168.16	5168.16	5168.16
Average Gross Block	5168.16	5168.16	5168.16	5168.16	5168.16
Freehold Land	0.00	0.00	0.00	0.00	0.00
Rate of Depreciation (%)	5.43	5.43	5.43	5.43	5.43
Balance useful life of the asset	26	25	24	23	22

Elapsed life	4	5	6	7	8
Aggregate Depreciable value	4658.69	4658.69	4658.69	4658.69	4658.69
Depreciation during the year	280.61	280.61	280.61	280.61	280.61
Aggregate Cumulative Depreciation	1407.66	1688.27	1968.88	2249.49	2530.10
Remaining Aggregate Depreciable Value	3531.64	3251.03	2970.42	2689.81	2409.20

Operation & Maintenance Expenses (O&M Expenses)

55. Regulation 35(3)(a) 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 pe	r bay)			L	
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 M	VA)				
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-	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

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:

- 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;
- the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole iii. 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 bipole 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;
- 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
- 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.
- The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of substation bays, transformer capacity of the transformer (in MVA) and km of line



length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.

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

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

- (4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up."
- 56. The O&M Expenses claimed by the Petitioner of the transmission asset for the 2019-24 period are as under:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Sub-stati	on bays			
No. of 400 kV bays	4	4	4	4	4
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
O&M Bays	128.60	133.12	137.80	142.64	147.64
	Transmiss	sion Line			
D/C Twin/Triple Conductor					
Line Length (km)	9.274	9.274	9.274	9.274	9.274
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
O&M Transmission Line	8.17	8.46	8.75	9.06	9.38
C	ommunicat	tion System	l.		
PLCC (Original Project Cost)	56.09	56.09	56.09	56.09	56.09
Norms (% of Original Project Cost)	2	2	2	2	2
O&M PLCC	1.12	1.12	1.12	1.12	1.12
Total O&M expense (₹ in lakh)	137.89	142.70	147.68	152.82	158.14

57. 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.

Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed.

^{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."

58. The O&M Expenses allowed for the transmission asset are as under:

Particulars	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24
Sub-station bays					
Bhachau: VERSANA BAYS	2	2	2	2	2
VARSANA (GETCO) BACHAU BAYS	2	2	2	2	2
Norms (₹ lakh/Bay)					
400 kV Sub-station Bays (AIS)	32.15	33.28	34.45	35.66	36.91
Total Sub-station O&M	128.6 0	133.12	137.80	142.64	147.64
Transmission Lines (Line length in Km)					
400 KV D/C BACHAU (PG) – VERSANA (GETCO)	9.274	9.274	9.274	9.274	9.274
Norms (₹ lakh/km)					
D/C Twin Conductor	0.881	0.912	0.944	0.977	1.011
Total Transmission Line O&M	8.17	8.46	8.75	9.06	9.38
Total O&M expense (₹ in lakh)	136.7 7	141.58	146.55	151.70	157.02

Interest on Working Capital (IWC)

59. Regulations 34(1)(c), 34(3), 34(4) and 3(7) of the 2019 Tariff Regulations provide as under:

"34. Interest on Working Capital

(1)...

- (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
 - i. Receivables equivalent to 45 days of 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 not withstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency."
- "3. Definitions ...
- (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;"
- 60. The Petitioner has submitted that it has computed IWC for the 2019-24 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%.
- 61. 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, whereas, the rate of interest for 2020-21 onwards has been considered as 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points). The components of the working capital and interest thereon allowed for the transmission asset are as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	11.40	11.80	12.21	12.64	13.08
Maintenance Spares	20.52	21.24	21.98	22.76	23.55
Receivables	114.80	112.43	110.01	107.61	104.93
Total Working Capital	146.71	145.46	144.21	143.01	141.57
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	17.68	16.36	16.22	16.09	15.93

Annual Fixed Charges for the 2019-24 Tariff Period

The transmission charges allowed for the transmission asset for the 2019-24 62. tariff period are as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	280.61	280.61	280.61	280.61	280.61
Interest on Loan	207.41	182.15	157.72	133.25	108.71
Return on Equity	291.20	291.20	291.20	291.20	291.20



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Interest on Working Capital	17.68	16.36	16.22	16.09	15.93
O&M Expenses	136.77	141.58	146.55	151.70	157.02
Total	933.68	911.90	892.31	872.86	853.46

Filing Fee and the Publication Expenses

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

Licence Fee & RLDC Fees and Charges

64. 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

65. The Petitioner has submitted that, if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondents to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government / Statutory authorities, the same may be allowed to be recovered from the beneficiaries. Since, GST is not levied on transmission service at present we are of the view that the Petitioner's prayer is premature.



Security Expenses

- 66. The Petitioner has submitted that the security expenses for 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 a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.
- 67. 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 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

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

Sharing of Transmission Charges

- 69. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of 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 the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.
- 70. To summarise, the trued-up Annual Fixed Charges allowed for the transmission asset for the 2014-19 tariff period are as under:

(₹ in lakh)

Particular	2014-15 (Pro-rata for 83 days)	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	245.16	1117.13	1146.96	1140.28	1128.59

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

(₹ in lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	933.68	911.90	892.31	872.86	853.46

72. This order disposes of Petition No. 196/TT/2020.

Sd/ (Arun Goyal) Member Sd/ (I. S. Jha) Member

Sd/ (P. K. Pujari) Chairperson

196/TT/2020 2014-19 True Up

Petition No.: Period:

2014-19	Combined Admitted	Proje	Projected Additional Capitalization (₹ in lakh)	Iditional Cap (₹ in lakh)	oitalizati	no	Admitted	90	Ann	ual Depreci	iation as per (₹ in lakh)	Annual Depreciation as per Regulations (₹ in lakh)	SI
Capital Expenditure	Capital Cost as on 1.4.2014 (₹ in lakh)	2014-	2015-16	2016-	2017-	2018-	as on 31.3.2019 (₹ in lakh)	Depreciation as per Regulations	2014-15	2015-16	2016-17	2017-18	2018-19
Building, Civil Works & Colony	00.00	0.00	00:00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	00.0	00.00	0.00
Transmission Line	2779.56	36.09	94.36	29.16	1.80	00.00	2940.97	5.28%	147.72	151.16	154.42	155.24	155.28
Substation	1659.40	19.68	334.62	53.43	30.49	0.00	2097.62	5.28%	88.13	97.49	107.73	109.95	110.75
PLCC	55.92	00.00	0.17	00.0	0.00	0.00	56.09	6.33%	3.52	3.55	3.55	3.55	3.55
IT Equipment and software	73.26	0.00	0.22	00.0	0.00	00.0	73.48	15%	3.87	3.87	3.88	3.88	3.88
Total	4568.14	55.77	429.37	82.59	32.29	0.00	5168.16	Total	243.27	256.07	269.58	272.62	273.47
								Average Gross Block (₹ in lakh)	4596.03	4838.60	5094.58	5152.02	5168.16
								Weighted Average Rate of Depreciation (%)	5.29	5.29	5.29	5.29	5.29



2019-24 Tariff 196/TT/2020

Petition No.:

Combined Admitted A	Period:	2019-24 Tariff												1
Capital Cost as on as	2019-24	Combined	Pro	jected Ad	ditional C ₹ in lakh)	apitalizat	ion	Admitted	Rate of	Ann	nual Deprec	iation as po (₹ in lakh)	er Regulation	Suc
3 Civil Works & Doo 0.00<	Capital Expenditure	Capital Cost as on 1.4.2019 (₹ in lakh)	2019-	2020-	2021-	2022-	2023-	Cost as on 31.3.2024 (₹ in lakh)	Depreciation as per Regulations	2019-20	2020-21	2021-22	2022-23	2023-24
nission Line 2940.97 0.00 0.00 0.00 0.00 0.00 0.00 2940.97 5.28% 155.28 155.28 155.28 155.28 155.28 155.28 155.28 110.75 110.2	Building Civil Works & Colony	0.00	00.00	00.00	00.00	0.00	0.00	00.00	3.34%	0.00	00.00	00.00	00.00	0.00
tion 2097.62 0.00 0.00 0.00 0.00 0.00 0.00 2097.62 5.28% 110.75	Transmission Line	2940.97	00.00	00.00	00.00	00.00	00.00	2940.97	5.28%	155.28	155.28	155.28	155.28	155.28
56.09 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 5168.16 Total 280.61 <t< td=""><td>Substation</td><td>2097.62</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>2097.62</td><td>5.28%</td><td>110.75</td><td>110.75</td><td>110.75</td><td>110.75</td><td>110.75</td></t<>	Substation	2097.62	0.00	0.00	0.00	0.00	0.00	2097.62	5.28%	110.75	110.75	110.75	110.75	110.75
Total 73.48 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 5168.16 Total 280.61	PLCC	56.09	00'0	00.00	0.00	00.00	0.00	56.09	6.33%	3.55	3.55	3.55	3.55	3.5
5168.16 0.00 0.00 0.00 0.00 5168.16 Total 280.61 28	IT Equipment (Incl. Software)	73.48	00.00	0.00	00.00	00:00	0.00	73.48	15%	11.02	11.02	11.02	11.02	11.0
5168.16 5168.16 5168.16 5168.16 516 5.43 5.43 5.43 5.43	Total	5168.16	0.00	0.00	0.00	0.00	00.00	5168.16	Total	280.61	280.61	280.61	280.61	280.61
5.43 5.43 5.43								Average 6 (₹ in	Gross Block lakh)	5168.16	5168.16	5168,16	5168.16	5168.1
								Weighted A	Average Rate ciation (%)	5.43	5.43	5.43	5.43	5.4



Summary of Tariff

Form No. - 1

Name of the	Transmission Licensee:	Power Grid Corporation	on of India Limited	
Project	WRSS-XIII			
Element Description	400 KV D/C Bachau (P	PG) -Versana (GETCO)	alongwith associat	ted bay
Region	Western Region		DOCO Date	Jan 8, 2015

(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	280.60	280.60	280.60	280.60	280.60
Interest on Loan-Form No. 9E	207.12	180.74	156.35	132.57	108.65
Return on Equity-Form No. 8	291.21	291.21	291.21	291.21	291.21
Int. on Working capital-Form No.11	17.67	16.35	15.11	14.99	17.00
Op. and maintenance-Form No.2	136.77	141.58	146.55	151.70	157.02
Total AFC	933.37	910.48	889.82	871.07	854.48

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(Petitioner)



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

Name of the Tr	Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	WRSS-XIII			
Element Description	400 KV D/C Bachau (P	400 KV D/C Bachau (PG) -Versana (GETCO) alongwith associated bay	зау	
Region	Western Region		DOCO Date	Jan 8, 2015

1. Transmission Lines

I. Itansmission Lines								(Amount in Rs. Lakh)	Rs. Lakh	
	Type of		S/C or No of Sub- Voltage Line	Voltage	Line	Line Reactor	Line	Date of	Covere pre	Covered in the present petition
Name of Line	Line AC/ HVDC	D/C	Conductors Level Bays KV	Level	Bays	(Including Switchable Reactor)	Length	Length Commercial Yes/No If No, Km operation Petition No.	Yes/No	If No, Petition No.
400 KV D/C BACHAU (PG) - VERSANA (GETCO)	AC	DC	2	400 KV	400 KV 0.000 0.000	0.000	9.274	9.274 Jan 8, 2015	>	

Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
DOUBLE CIRCUIT (TWIN CONDUCTOR)					
Moderative Rate of O&M as per Regulation	0.881	0.912	0.944	0.977	1.011
No. of Units - Length in KM)	9.274	9.274	9.274	9.274	9.274
O&M/CIalbred	8.17	8.46	8.75	9.06	9.38

	Type of Voltage	Voltage	No. of Transfor ms/		Š.	No. of Bays		Σ	VA/MV	MVA/MVAR Capacity	acity	Date of	Covered in the present petition
Name of Sub-station	Substation Level KV	Level	Reactor/ SVC etc. (with capacity)	765 KV	400 KV	220 KV	132 K S	765 KV	400 X	220 KV	132 K	Comm.	Ye If No, s/ Petitio No n No.
Bhachau:VERSANA BAYS	Conventio	400 KV			2.000							Jan 8, 2015	>-
:VARSANA (GETCO) BACHAU BAYS	Conventio	400 KV			2.000							Jan 8, 2015	>-

Summary:

&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	4.00	4.00	4.00	4.00	4.00
O&M Claimed	128.60	133.12	137.80	142.64	147.64







Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M					
Transmission Line	8.17	8.46	8.75	90.6	9.38
Substation	128.60	133.12	137.80	142.64	147.64
Communication System	0.00	0.00	00.00	00.00	0.00
Total Normative O&M	136.77	141.58	146.55	151.70	157.02
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	00:00	00.00	0.00
*Actual Capital Spare consumed	0.00	00.00	00.00	00:00	0.00
ت *Insurance Premium Paid	00.00	00.00	00.00	00.00	0.00
Total O&M	136.77	141.58	146.55	151.70	157.02

(Petitioner)



Normative parameters considered for tariff computations

Name of the	Transmission Licensee	Power Grid Corporat	tion of India Limit	ed	
Project	WRSS-XIII				
Element Description	400 KV D/C Bachau (PC	3) -Versana (GETCO)	alongwith associ	ated bay	
Region	Western Region		DOCO Date	Jan 8, 2015	

(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)	-		,		2	
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)	1					2
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.806	0.881	0.912	0.944	0.976	1.011
Single Circuit (Bundled conductor with four sub- conductors)	0.691	0.755	0.781	0.809	0.837	867
Single Circuit (Twin & Triple Conductor)	0.461	0.503	0.521	0.539	0.558	0.578

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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

Name of the Tr	ansmission Licensee	Power Grid Corporation	on of India Limited	
Project	WRSS-XIII			
Element Description	400 KV D/C Bachau (P	G) -Versana (GETCO)	alongwith associate	ed bay
Region	Western Region		DOCO Date	Jan 8, 2015

(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	1,550.45	1,550.45	1,550.45	1,550.45	1,550.45
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)	1,550.45	1,550.45	1,550.45	1,550.45	1,550.45
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	1,550.45	1,550.45	1,550.45	1,550.45	1,550.45
Average Normative Equity	1,550.45	1,550.45	1,550.45	1,550.45	1,550.45
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	291.21	291.21	291.21	291.21	291.21
Pro rata return on Equity	291.21	291.21	291.21	291.21	RPOR29321

Calculation of WAR of interest on actual loan

Name of the	Transmission Licensee	Power Grid Corporation	on of India Limited					
Project	WRSS-XIII							
Element Description	400 KV D/C Bachau (I	400 KV D/C Bachau (PG) -Versana (GETCO) alongwith associated bay						
Region	Western Region		DOCO Date	Jan 8, 2015				

		(Allibuilt III No. Lakii)			
2019-20	2020-21	2021-22	2022-23	2023-24	
750.00	750.00	750.00	750.00	750.00	
187.50	250.00	312.50	375.00	437.50	
562.50	500.00	437.50	375.00	312.50	
0.00	0.00	0.00	0.00	0.00	
62.50	62.50	62.50	62.50	62.50	
500.00	437.50	375.00	312.50	250.00	
531.25	468.75	406.25	343.75	281.25	
9.30	9.30	9.30	9.30	9.30	
49.4063	43.5938	37.7813	31.9688	26.1563	
	750.00 187.50 562.50 0.00 62.50 500.00 531.25 9.30	750.00 750.00 187.50 250.00 562.50 500.00 0.00 0.00 62.50 62.50 500.00 437.50 531.25 468.75 9.30 9.30	750.00 750.00 750.00 187.50 250.00 312.50 562.50 500.00 437.50 0.00 0.00 0.00 62.50 62.50 62.50 500.00 437.50 375.00 531.25 468.75 406.25 9.30 9.30 9.30	2019-20 2020-21 2021-22 2022-23 750.00 750.00 750.00 750.00 187.50 250.00 312.50 375.00 562.50 500.00 437.50 375.00 0.00 0.00 0.00 0.00 62.50 62.50 62.50 62.50 500.00 437.50 375.00 312.50 531.25 468.75 406.25 343.75 9.30 9.30 9.30 9.30	

BOND - XLI -LOAN 2					
Gross Loan- Opening	500.00	500.00	500.00	500.00	500.00
Cumulative repayments of Loans upto previous year	125.00	166.67	208.33	250.00	291.67
Net loan-Opening	375.00	333.33	291.67	250.00	208.33
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	41.67	41.67	41.67	41.67	41.67
Net Loan-Closing	333.33	291.66	250.00	9208.33	166.66

Average Net Loan	354.17	312.50	270.84	229.17	187.50
Rate of Interest on Loan on Annual Basis	8.85	8.85	8.85	8.85	8.85
Interest on loan	31.344	27.6563	23.9693	20.2815	16.5938

BOND - XLIII -LOAN 3					
Gross Loan- Opening	700.00	700.00	700.00	700.00	700.00
Cumulative repayments of Loans upto previous year	116.67	175.00	233.33	291.67	350.00
Net loan-Opening	583.33	525.00	466.67	408.33	350.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	58.33	58.33	58.33	58.33	58.33
Net Loan-Closing	525.00	466.67	408.34	350.00	291.67
Average Net Loan	554.17	495.84	437.51	379.17	320.84
Rate of Interest on Loan on Annual Basis	7.93	7.93	7.93	7.93	7.93
Interest on loan	43.9457	39.3201	34.6945	30.0682	25.4426

SBI (2014-15) -ADDCAP2					
Gross Loan- Opening	7.07	7.07	7.07	7.07	7.07
Cumulative repayments of Loans upto previous year	0.00	0.71	1.41	2.12	2.83
Net loan-Opening	7.07	6.36	5.66	4.95	. 4.24
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.71	0.71	0.71	0.71	0.71
Net Loan-Closing	6.36	5.65	4.95	4.24	3.53
Average Net Loan	6.72	6.01	5.31	4.60	3.89
Rate of Interest on Loan on Annual Basis	7.993319	6.894349	6.65	7.243625	8.135644
Interest on loan	0.5372	0.4144	0.3531	0.3332	0.3165

SBI (2014-15) -ADDCAP4					
Gross Loan- Opening	139.00	139.00	139.00	139.00	139.00
Cumulative repayments of Loans upto previous year	0.00	13.90	27.80	41.70	55.60
Net loan-Opening	139.00	125.10	111.20	97.30	83.40
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0,00
Less: Repayment(s) of loan during the year	13.90	13.90	13.90	13.90	13.90
Net Loan-Closing	125.10	111.20	97.30	83.40	69.50
Average Net Loan	132.05	118.15	104.25	90.35	76.45
Rate of Interest on Loan on Annual Basis	7.993319	6.894349	6.65	7.243625	8.135644
Interest on loan	10.5552	8.1457	6.9326	6.5446	6.2197

BOND XLVI -LOAN 4					
Gross Loan- Opening	1,247.70	1,247.70	1,247.70	1,247.70	1,247.70
Cumulative repayments of Loans upto previous year	0.00	415.90	415.90	415.90	415.90
Net loan-Opening	1,247.70	831.80	831.80	831.80	831.80
Add: Drawl(s) during the year	9 0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	415.90	0.00	0.00	0.00	0.00
Net Loan-Closing	831.80	831.80	831.80	831.80	831.80
Average Net Loan	1,039.75	831.80	831.80	. 831.80	831.80
Rate of Interest on Loan on Annual Basis	9.30	9.30	9.30	9.30	9.30
Interest on loan	96.6968	77.3574	77.3574	77.3574	77.3574

BOND XLIX -ADDCAP1					
Gross Loan- Opening	39.04	39.04	39.04	39.04	39.04
Cumulative repayments of Loans upto previous year	0.00	13.01	13.01	13.01	13.01
Net loan-Opening	39.04	26.03	26.03	28.03	26.03

Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	13.01	0.00	0.00	0.00	0.00
Net Loan-Closing	26.03	26.03	26.03	26.03	26.03
Average Net Loan	32.54	26.03	26.03	26.03	26.03
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	2.652	2.1214	2.1214	2.1214	2.1214

BOND L -ADDCAP1					
Gross Loan- Opening	101.49	101.49	101.49	101.49	101.49
Cumulative repayments of Loans upto previous year	0.00	8.46	16.92	25.37	33.83
Net loan-Opening	101.49	93.03	84.57	76.12	67.66
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	8.46	8.46	8.46	8.46	8.46
Net Loan-Closing	93.03	84.57	76.11	67.66	59.20
Average Net Loan	97.26	88.80	80.34	71.89	63.43
Rate of Interest on Loan on Annual Basis	8.40	8.40	8.40	8.40	8.40
Interest on loan	8.1698	7.4592	6.7486	6.0388	5.3281

BOND LIII -ADDCAP2				2	
Gross Loan- Opening	31.92	31.92	31.92	31.92	31.92
Cumulative repayments of Loans upto previous year	0.00	0.00	2.66	5.32	7.98
Net loan-Opening	31.92	31.92	29.26	26.60	23.94
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	2.66	2.66	2.66	2.66
Net Loan-Closing	31.92	29.26	26.60	23.94 ORPO/	21.28
Average Net Loan	31.92	30.59	27.93	25.27	22.61

Rate of Interest on Loan on Annual Basis	8.13	8.13	8.13	8.13	8.13
Interest on loan	2.5951	2.487	2.2707	2.0545	1.8382

BOND LIV -ADDCAP1					
Gross Loan- Opening	7.41	7.41	7.41	7.41	7.41
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	2.47	2.47
Net loan-Opening	7.41	7.41	7.41	4.94	4.94
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	2.47	0.00	0.00
Net Loan-Closing	7.41	7.41	4.94	4.94	4.94
Average Net Loan	7.41	7.41	6.18	4.94	4.94
Rate of Interest on Loan on Annual Basis	7.97	7.97	7.97	7.97	7.97
Interest on loan	0.5906	0.5906	0.4925	0.3937	0.3937

BOND LIV -ADDCAP3					
Gross Loan- Opening	18.48	18.48	18.48	18.48	18.48
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	6.16	6.16
Net loan-Opening	18.48	18.48	18.48	12.32	12.32
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	6.16	0.00	0.00
Net Loan-Closing	18.48	18.48	12.32	12.32	12.32
Average Net Loan	18.48	18.48	15.40	12.32	12.32
Rate of Interest on Loan on Annual Basis	7.97	7.97	7.97	7.97	7.97
Interest on loan	1.4729	1.4729	1.2274	0.9819	0.9819

BOND 58 -ADDCAP2

Gross Loan- Opening	50.40	50.40	50.40	50.40	50.40
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	50.40	50.40	50.40	50.40	50.40
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	50.40	50.40	50.40	50.40	50.40
Average Net Loan	50.40	50.40	50.40	50.40	50.40
Rate of Interest on Loan on Annual Basis	7.89	7.89	7.89	7.89	7.89
Interest on loan	3.9766	3.9766	3.9766	3.9766	3.9766

BOND60 (LX) -ADDCAP1					
Gross Loan- Opening	15.53	15.53	15.53	15.53	15.53
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	15.53	15.53	15.53	15.53	15.53
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	15.53	15.53	15.53	15.53	15.53
Average Net Loan	15.53	15.53	15.53	15.53	15.53
Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	1,1182	1.1182	1.1182	1.1182	1.1182

Summary

Gross Loan- Opening	3,608.04	3,608.04	3,608.04	3,608.04	3,608.04
Cumulative repayments of Loans upto previous year	429.17	1,043.65	1,231.86	1,428.72	1,616.95
Net loan-Opening	3,178.87	2,564.39	2,376.18	2,179,32	PRATIO 991.09

Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	614.48	188.23	196.86	188.23	188.23
Net Loan-Closing	2,564.39	2,376.16	2,179.32	1,991.09	1,802.86
Average Net Loan	2,871.65	2,470.29	2,277.77	2,085.22	1,896.99
Rate of Interest on Loan on Annual Basis	8.8124	8.7323	8.7385	8.7875	8.8479
Interest on loan	253.0604	215.7136	199.0436	183.2388	167.8444



Calculation of interest on Normative loan

Name of the Transmission Licensee Power Grid Corporation of India Limited								
Project WRSS-XIII								
Element Description	400 KV D/C Bachau (PG) -Versana (GETCO) alongwith associated bay							
Region	Western Region		DOCO Date	Jan 8, 2015				

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	3,617.71	3,617.71	3,617.71	3,617.71	3,617.71
Cumulative repayments of Normative loan upto previous year	1,127.04	1,407.64	1,688.24	1,968.84	2,249.44
Net normative loan-Opening	2,490.67	2,210.07	1,929.47	1,648.87	1,368.27
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	280.60	280.60	280.60	280.60	280.60
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	2,210.07	1,929.47	1,648.87	1,368.27	1,087.67
Average normative loan	2,350.37	2,069.77	1,789.17	1,508.57	1,227.97
Weighted Average Rate of interest on actual loan	8.8124	8.7323	8.7385	8.7875	8.8479
Interest on normative loan	207.12	180.74	156.35	132.57	108.65
Pro rata interest on normative loan	207.12	180.74	156.35	132.57	108.65

Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the 1	Fransmission Licensee	Power Grid Corpora	tion of India Limite	ed				
Project	WRSS-XIII							
Element Description	MM KV D/C Rachau /P(2) -Vareana /(2F LCO) alongwith associated hav							
Region	Western Region		DOCO Date	Jan 8, 2015				

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2024
2019-20						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	2,940.97	0.00	2,940.97	2,940.97	5.28	155.28
Sub Station	2,097.62	0.00	2,097.62	2,097.62	5.28	110.75
Comm. Sys. excluding Fiber Optic	56.09	0.00	56.09	56.09	6.33	3.55
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	73.48	0.00	73.48	73.48	15.00	11.02
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	5,168.16	0.00	5,168.16	5,168.16	0.00	280.60
Weighted Average Rate of Depreciation(%)					5.429398	

2020-21					ORPORATION
Land(Freehold)	0.00	0.00	0.00	0.00	O.00

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Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	2,940.97	0.00	2,940.97	2,940.97	5.28	155.28
Sub Station	2,097.62	0.00	2,097.62	2,097.62	5.28	110.75
Comm. Sys. excluding Fiber Optic	56.09	0.00	56.09	56.09	6.33	3.55
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	73.48	0.00	73.48	73.48	15.00	11.02
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	5,168.16	0.00	5,168.16	5,168.16	0.00	280.60
Weighted Average Rate of Depreciation(%)					5.429398	

2021-22						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	2,940.97	0.00	2,940.97	2,940.97	5.28	155.28
Sub Station	2,097.62	0.00	2,097.62	2,097.62	5.28	110.75
Comm. Sys. excluding Fiber Optic	56.09	0.00	56.09	56.09	6.33	3.55
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	73.48	0.00	73.48	73.48	15.00	11.02
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	5,168.16	0.00	5,168.16	5,168.16	0.08	PORATIO 280.60
Weighted Average Rate of Depreciation(%)					5.429398	पावरविष्ठ POWERGRID

2022-23						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	2,940.97	0.00	2,940.97	2,940.97	5.28	155.28
Sub Station	2,097.62	0.00	2,097.62	2,097.62	5.28	110.75
Comm. Sys. excluding Fiber Optic	56.09	0.00	56.09	56.09	6.33	3.55
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	73.48	0.00	73.48	73.48	15.00	11.02
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	5,168.16	0.00	5,168.16	5,168.16	0.00	280.60
Weighted Average Rate of Depreciation(%)					5.429398	

0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	3.34	0.00
2,940.97	0.00	2,940.97	2,940.97	5.28	155.28
2,097.62	0.00	2,097.62	2,097.62	5.28	110.75
56.09	0.00	56.09	56.09	6.33	3.55
0.00	0.00	0.00	0.00	3.34	0.00
73.48	0.00	73.48	73.48	15.00	11.02
0.00	0.00	0.00	0.00	5.28	RPORATIO 0.00
0.00	0.00	0.00	0.00	6.33	पालस्वात के .00
5,168.16	0.00	5,168.16	5,168.16	0.00	280.60
	0.00 2,940.97 2,097.62 56.09 0.00 73.48 0.00 0.00	0.00 0.00 2,940.97 0.00 2,097.62 0.00 56.09 0.00 0.00 0.00 73.48 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 2,940.97 0.00 2,940.97 2,097.62 0.00 2,097.62 56.09 0.00 56.09 0.00 0.00 0.00 73.48 0.00 73.48 0.00 0.00 0.00 0.00 0.00 0.00 5,168.16 0.00 5,168.16	0.00 0.00 0.00 0.00 2,940.97 0.00 2,940.97 2,940.97 2,097.62 0.00 2,097.62 2,097.62 56.09 0.00 56.09 56.09 0.00 0.00 0.00 0.00 73.48 0.00 73.48 73.48 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 5,168.16 0.00 5,168.16 5,168.16	0.00 0.00 0.00 0.00 3.34 2,940.97 0.00 2,940.97 2,940.97 5.28 2,097.62 0.00 2,097.62 2,097.62 5.28 56.09 0.00 56.09 56.09 6.33 0.00 0.00 0.00 0.00 3.34 73.48 0.00 73.48 73.48 15.00 0.00 0.00 0.00 0.00 5.28 0.00 0.00 0.00 0.00 6.33 5,168.16 0.00 5,168.16 5,168.16 0.00

0416002 : Truing Up: 400 KV D/C Bachau (PG) -Versana (GETCO) alongwith associated bay

Weighted Average Rate of Depreciation(%)	1		5.429398	
Depreciation (%)				

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Statement of Depreciation

Name of the	Transmission Licensee	Power Grid Corporati	on of India Limited					
Project	WRSS-XIII							
Element Description	400 KV D/C Bachau (PG) -Versana (GETCO) alongwith associated bay							
Region	Western Region		DOCO Date	Jan 8, 2015				

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				ı	
1.1 Weighted Average useful life of the Asset/ Project	30.00	30.00	30.00	30.00	30.00
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)	26.00	25.00	24.00	23.00	22.00
Capital Base					
1.4 Opening capital cost	5,168.16	5,168.16	5,168.16	5,168.16	5,168.16
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	5,168.16	5,168.16	5,168.16	5,168.16	5,168.16
1.8 Average capital cost	5,168.16	5,168.16	5,168.16	5,168.16	5,168.16
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	73.48	73.48	73.48	73.48	73.48
1.11 Asset having 10% salvage value included in 1.8	5,094.68	5,094.68	5,094.68	5,094.68	5,094.68
1.12 Depreciable Value(1.10+90% of 1.11)	4,658.69	4,658.69	4,658.69	4,658.69	4,658.69
Depreciation for the period and Cum. Depreciation				20	RPORATTO
1.13 Weighted Average Rate of depreciation	5.429398	5.429398	5.429398	5.429398	Fow 5 429398

1.14 Depreciation(for the period)	280.60	280.60	280.60	280.60	280.60
1.15 Depreciation(Annualised)	280.60	280.60	280.60	280.60	280.60
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	1,127.04	1,407.64	1,688.24	1,968.84	2,249.44
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	1,407.64	1,688.24	1,968.84	2,249.44	2,530.04

Name of the Transmission Licensee Power Grid Corporation of India Limited					
Project	WRSS-XIII				
Element Description	400 KV D/C Bachau (F	G) -Versana (GETCO)	alongwith associ	ated bay	
Region	Western Region		DOCO Date	Jan 8, 2015	

2019-20	2020-21	2021-22	2022-23	2023-24
366.00	365.00	365.00	365.00	366.00
366.00	365.00	365.00	365.00	366.00
11.40	11.80	12.21	12.64	13.09
20.52	21.24	21.98	22.76	23.55
114.76	112.25	109.70	107.39	105.06
146.68	145.29	143.89	142.79	141.70
12.05	11.25	10.50	10.50	12.00
17.67	16.35	15.11	14.99	17.00
17.67	16.35	15.11	14.99	17.00
	366.00 366.00 11.40 20.52 114.76 146.68 12.05 17.67	366.00 365.00 366.00 365.00 11.40 11.80 20.52 21.24 114.76 112.25 146.68 145.29 12.05 11.25 17.67 16.35	366.00 365.00 365.00 366.00 365.00 365.00 11.40 11.80 12.21 20.52 21.24 21.98 114.76 112.25 109.70 146.68 145.29 143.89 12.05 11.25 10.50 17.67 16.35 15.11	366.00 365.00 365.00 365.00 366.00 365.00 365.00 365.00 11.40 11.80 12.21 12.64 20.52 21.24 21.98 22.76 114.76 112.25 109.70 107.39 146.68 145.29 143.89 142.79 12.05 11.25 10.50 10.50 17.67 16.35 15.11 14.99

Summary of Tariff

Form No. - 1

Name of the Tr	ansmission Licensee:	Power Grid Corporation	on of India Limited				
Project	WRSS-XIII						
Element Description	400 KV D/C Bachau (PG) -Versana (GETCO) alongwith associated bay						
Region	Western Region		DOCO Date	Jan 8, 2015			

(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	276.43	274.44	266.94	72.82	72.82
Interest on Loan-Form No. 9E	83.73	59.06	35.57	20.86	14.61
Return on Equity-Form No. 8	291.21	291.21	291.21	291.21	291.21
Int. on Working capital-Form No.11	15.13	15.02	14.86	12.04	12.30
Op. and maintenance-Form No.2	126.10	132.72	139.68	147.02	154.71
Total AFC	792.60	772.45	748.26	543.95	545.65



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

Name of the Tr	Name of the Transmission Licensee Power	Power Grid Corporation of India Limited		
Project	WRSS-XIII			
Element Description	400 KV D/C Bachau (PG) -Ver	400 KV D/C Bachau (PG) -Versana (GETCO) alongwith associated bay	oay	
Region	Western Region		DOCO Date	Jan 8, 2015

1. Transmission Lines

								(AIIIOUIII III NS. LAKII)	NS. Lan	
	Type of	-	No of Sub-	Voltage	Line	S/C or No of Sub- Voltage Line Reactor	Line	Date of	Covere pre pet	Covered in the present petition
Name of Line	Line AC/ HVDC		Conductors	Level	Bays	(Including Switchable Reactor)	Length		Yes/No	If No, Petition No.
400 KV D/C BACHAU (PG) - VERSANA (GETCO)	AC	20	2	400 KV 0.000 0.000	0.000	0.000	9.274	9.274 Jan 8, 2015	>	

Summary:

	O&M Expenses For the Transmission Lines Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
	DOUBLE CIRCUIT (TWIN CONDUCTOR)					
X	Normative Rate of O&M as per Regulation	0.861	0.906	0.953	1.003	1.056
.OTL.	No of Unite (Length in KM)	9.274	9.274	9.274	9.274	9.274
0	O&M Claimed	7.98	8.40	8.84	9.30	9.79

2. Sub Station

	Type of Voltage	Voltage	No. of Transfor ms/		No.	No. of Bays		×	MVA/MVAR Capacity	AR Cap	acity	Date of	Covered in the present petition
Name of Sub-station	Substation Level KV	Level	Reactor/ SVC etc. (with capacity)	765 KV	400 KV	220 KV	₹ 32	765 KV	400 KV	220 KV	132 KV	Comm.	Ye If No, s/ Petitio No n No.
Bhachau:VERSANA BAYS	Conventio	400 KV			2.000							Jan 8, 2015 Y	>-
:VARSANA (GETCO) BACHAU BAYS	Conventio nal	400 KV			2.000							Jan 8, 2015	>-

Summary:

@&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	4.00	4.00	4.00	4.00	4.00
O&M Claimed	118.12	124.32	130.84	137.72	144.92







Particular	2024-25	2025-26	2026-27	2027-28	2028-29
A) Normative O&M					
Transmission Line	7.98	8.40	8.84	9.30	9.79
Substation	118.12	124.32	130.84	137.72	144.92
Communication System	00.0	00.0	00.00	00.00	00.0
Total Normative O&M	126.10	132.72	139.68	147.02	154.71
B) O&M Claimed under Regulation 35 (3)(C) (*·The same is not being claimed and will be claimed through separate Petition)					
*Security Expenses	00.0	00.0	00.00	0.00	0.00
*Actual Capital Spare consumed	00.0	00.0	00.00	00.00	0.00
*Insurance Premium Paid	00.0	00.00	00.00	00.00	0.00
Total O&M	126.10	132.72	139.68	147.02	154.71





Normative parameters considered for tariff computations

Name of the T	ransmission Licensee	Power Grid Corporat	ion of India Limite	ed
Project	WRSS-XIII			
Element Description	400 KV D/C Bachau (PG	6) -Versana (GETCO)	alongwith associa	ated bay
Region	Western Region		DOCO Date	Jan 8, 2015

(Amount in Rs. Lakh) 2027-28 **Particulars** 2023-24 2024-25 2025-26 2026-27 2028-29 Base Rate of Return of Equity (in %) 17.472 17.472 17.472 17.472 17.472 17.472 Tax Rate (in %) Effective tax rate (in %) 18.782 18.782 18.782 18.782 18.782 18.782 Grossed up Rate for ROE of 15.5% (in %) 18.176 18.176 18.176 18.176 Grossed up Rate for ROE of 15.0% (in %) 18.176 18.176 98.00 98.00 98.00 98.00 98.00 98.00 Target availability - AC System (in %) 96.00 96.00 96.00 96.00 96.00 96.00 Target availability - HVDC System (in %) Norms for sub-station Bays (Rs Lakh per bay) 51.68 41.34 43.51 45.79 48.20 50.73 765 kV 36.91 29.53 31.08 32.71 34.43 400 kV 36.23 20.67 21.75 22.90 24.10 25.84 25.36 220 kV 16.61 17.48 18.46 15.78 18.40 19.35 132 kV and below Norms for Transformers (Rs Lakh per MVA) 0.564 0.262 0.276 0.29 0.305 0.322 765 kV 0.411 0.262 0.276 0.29 0.305 400 kV 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) 0.00 0.262 0.276 0.29 765 kV t 305 400 kV 0.00 0.262 0.276 0.29

Page 1 of 2

0416002 : 400 KV D/C Bachau (PG) -Versana (GETCO) alongwith associated bay

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)				V.		
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 subconductors)	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)				11		· · · · · · · · · · · · · · · · · · ·
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



Calculation of ROE

Name of the	Transmission Licensee	Power Grid Corporation	on of India Limite	d	
Project	WRSS-XIII				
Element Description	400 KV D/C Bachau (PG) -Versana (GETCO)	alongwith assoc	ated bay	
Region	Western Region		DOCO Date	Jan 8, 2015	

(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	1,550.45	1,550.45	1,550.45	1,550.45	1,550.45
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)	1,550.45	1,550.45	1,550.45	1,550.45	1,550.45
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	1,550.45	1,550.45	1,550.45	1,550.45	1,550.45
Average Normative Equity	1,550.45	1,550.45	1,550.45	1,550.45	1,550.45
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	291.21	291.21	291.21	291.21	291.21
Return on Equity	291.21	291.21	291.21	291.21	291.21

Calculation of WAR of interest on actual loan

Name of the	Transmission Licensee	Power Grid Corporation	on of India Limited	
Project	WRSS-XIII		,	
Element Description	400 KV D/C Bachau (P	PG) -Versana (GETCO)	alongwith associate	ed bay
Region	Western Region		DOCO Date	Jan 8, 2015

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Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
BOND XL -LOAN 1					
Gross Loan- Opening	750.00	750.00	750.00	750.00	750.00
Cumulative repayments of Loans upto previous year	500.00	562.50	625.00	687.50	750.00
Net loan-Opening	250.00	187.50	125.00	62.50	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	62.50	62.50	62.50	62.50	0.00
Net Loan-Closing	187.50	125.00	62.50	0.00	0.00
Average Net Loan	218.75	156.25	93.75	31.25	0.00
Rate of Interest on Loan on Annual Basis	9.30	9.30	9.30	9.30	9.30
Interest on loan	20.3438	14.5313	8.7188	2.9063	0.00

BOND - XLI -LOAN 2				•	
Gross Loan- Opening	500.00	500.00	500.00	500.00	500.00
Cumulative repayments of Loans upto previous year	333.33	375.00	416.67	458.33	500.00
Net loan-Opening	166.67	125.00	83.33	41.67	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	41.67	41.67	41.67	COAT-67	0.00
Net Loan-Closing	125.00	83.33	41.66	0.00	0.00

Average Net Loan	145.84	104.17	62.50	20.84	0.00
Rate of Interest on Loan on Annual Basis	8.85	8.85	8.85	8.85	8.85
Interest on loan	12.9068	9.219	5.5313	1.8443	0.00

BOND - XLIII -LOAN 3					
Gross Loan- Opening	700.00	700.00	700.00	700.00	700.00
Cumulative repayments of Loans upto previous year	408.33	466.67	525.00	583.33	641.67
Net loan-Opening	291.67	233.33	175.00	116.67	58.33
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	58.33	58.33	58.33	58.33	58.33
Net Loan-Closing	233.34	175.00	116.67	58.34	0.00
Average Net Loan	262.51	204.17	145.84	87.51	29.17
Rate of Interest on Loan on Annual Basis	7.93	7.93	7.93	7.93	7.93
Interest on loan	20.817	16.1907	11.5651	6.9395	2.3132

SBI (2014-15) -ADDCAP2					
Gross Loan- Opening	7.07	7.07	7.07	7.07	7.07
Cumulative repayments of Loans upto previous year	3.54	4.24	4.95	5.66	6.36
Net loan-Opening	3.53	2.83	2.12	1.41	0.71
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.71	0.71	0.71	0.71	0.71
Net Loan-Closing	2.82	2.12	1.41	0.70	0.00
Average Net Loan	3.18	2.48	1.77	1.06	0.36
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.2608	0.2034	0.1451	0.0869	0.0295

SBI (2014-15) -ADDCAP4					
Gross Loan- Opening	139.00	139.00	139.00	139.00	139.00
Cumulative repayments of Loans upto previous year	69.50	83.40	97.30	111.20	125.10
Net loan-Opening	69.50	55.60	41.70	27.80	13.90
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	13.90	13.90	13.90	13.90	13.90
Net Loan-Closing	55.60	41.70	27.80	13.90	0.00
Average Net Loan	62.55	48.65	34.75	20.85	6.95
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	5.1291	3.9893	2.8495	1.7097	0.5699

BOND XLVI -LOAN 4					
Gross Loan- Opening	1,247.70	1,247.70	1,247.70	1,247.70	1,247.70
Cumulative repayments of Loans upto previous year	415.90	831.80	831.80	831.80	831.80
Net loan-Opening	831.80	415.90	415.90	415.90	415.90
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	415.90	0.00	0.00	0.00	0.00
Net Loan-Closing	415.90	415.90	415.90	415.90	415.90
Average Net Loan	623.85	415.90	415.90	415.90	415.90
Rate of Interest on Loan on Annual Basis	9.30	9.30	9.30	9.30	9.30
Interest on loan	58.0181	38.6787	38.6787	38.6787	38.6787

BOND XLIX -ADDCAP1					
Gross Loan- Opening	39.04	39.04	39.04	39.04	39.04
Cumulative repayments of Loans upto previous year	13.01	26.03	26.03	26.03 CORPO	26.03
Net loan-Opening	26.03	13.01	13.01	3/13,01	13.01

Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	13.01	0.00	0.00	0.00	0.00
Net Loan-Closing	13.02	13.01	13.01	13.01	13.01
Average Net Loan	19.53	13.01	13.01	13.01	13.01
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	1.5917	1.0603	1.0603	1.0603	1.0603

BOND L -ADDCAP1					
Gross Loan- Opening	101.49	101.49	101.49	101.49	101.49
Cumulative repayments of Loans upto previous year	42.29	50.75	59.20	67.66	76.12
Net loan-Opening	59.20	50.74	42.29	33.83	25.37
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	8.46	8.46	8.46	8.46	8.46
Net Loan-Closing	50.74	42.28	33.83	25.37	16.91
Average Net Loan	54.97	46.51	38.06	29.60	21.14
Rate of Interest on Loan on Annual Basis	8.40	8.40	8.40	8.40	8.40
Interest on loan	4.6175	3.9068	3.197	2.4864	1.7758

BOND LIII -ADDCAP2					
Gross Loan- Opening	31.92	31.92	31.92	31.92	31.92
Cumulative repayments of Loans upto previous year	10.64	13.30	15.96	18.62	21.28
Net loan-Opening	21.28	18.62	15.96	13.30	10.64
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	2.66	2.66	2.66	2.66	2.66
Net Loan-Closing	18.62	15.96	13.30	10.64	7.98
Average Net Loan	19.95	17.29	14.63	3 37	9.31

Rate of Interest on Loan on Annual Basis	8.13	8.13	8.13	8.13	8.13
Interest on loan	1.6219	1.4057	1.1894	0.9732	0.7569

BOND LIV -ADDCAP1					
Gross Loan- Opening	7.41	7.41	7.41	7.41	7.41
Cumulative repayments of Loans upto previous year	2.47	2.47	2.47	4.94	4.94
Net loan-Opening	4.94	4.94	4.94	2.47	2.47
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	2.47	0.00	0.00
Net Loan-Closing	4.94	4.94	2.47	2.47	2.47
Average Net Loan	4.94	4.94	3.71	2.47	2.47
Rate of Interest on Loan on Annual Basis	7.97	7.97	7.97	7.97	7.97
Interest on loan	0.3937	0.3937	0.2957	0.1969	0.1969

BOND LIV -ADDCAP3					
Gross Loan- Opening	18.48	18.48	18.48	18.48	18.48
Cumulative repayments of Loans upto previous year	6.16	6.16	6.16	12.32	12.32
Net loan-Opening	12.32	12.32	12.32	6.16	6.16
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	6.16	0.00	0.00
Net Loan-Closing	12.32	12.32	6.16	6.16	6.16
Average Net Loan	12.32	12.32	9.24	6.16	6.16
Rate of Interest on Loan on Annual Basis	7.97	7.97	7.97	7.97	7.97
Interest on loan	0.9819	0.9819	0.7364	0.491	0.491

BOND 58 -ADDCAP2

Gross Loan- Opening	50.40	50.40	50.40	50.40	50.40
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	50.40	50.40
Net loan-Opening	50.40	50.40	50.40	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	50.40	0.00	0.00
Net Loan-Closing	50.40	50.40	0.00	0.00	0.00
Average Net Loan	50.40	50.40	25.20	0.00	0.00
Rate of Interest on Loan on Annual Basis	7.89	7.89	7.89	7.89	7.89
Interest on loan	3.9766	3.9766	1.9883	0.00	0.00

BOND60 (LX) -ADDCAP1					
Gross Loan- Opening	15.53	15.53	15.53	15.53	15.53
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	15.53
Net loan-Opening	15.53	15.53	15.53	15.53	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	15.53	0.00
Net Loan-Closing	15.53	15.53	15.53	0.00	0.00
Average Net Loan	15.53	15.53	15.53	7.77	0.00
Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	1.1182	1.1182	1.1182	0.5594	0.00

Summary

Gross Loan- Opening	3,608.04	3,608.04	3,608.04	3,608.04	3,608.04
Cumulative repayments of Loans upto previous year	1,805.17	2,422.32	2,610.54	2,857.79	ORP 3,061.55
Net loan-Opening	1,802.87	1,185.72	997.50	750.25	546.49

Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	617.14	188.23	247.26	203.76	84.06
Net Loan-Closing	1,185.73	997.49	750.24	546.49	462.43
Average Net Loan	1,494.32	1,091.62	873.89	648.39	504.47
Rate of Interest on Loan on Annual Basis	8.8185	8.7627	8.8196	8.9348	9.0931
Interest on loan	131.7771	95.6556	77.0738	57.9326	45.8722



Calculation of interest on Normative loan

Name of the	Transmission Licensee	Power Grid Corporati	on of India Limited						
Project	ct WRSS-XIII								
Element Description	MOD KV DV Bachau /PCDVareana //CE DCO) alongwith accordated hav								
Region	Western Region		DOCO Date	Jan 8, 2015					

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	3,617.71	3,617.71	3,617.71	3,617.71	3,617.71
Cumulative repayments of Normative loan upto previous year	2,530.04	2,806.47	3,080.91	3,347.85	3,420.67
Net normative loan-Opening	1,087.67	811.24	536.80	269.86	197.04
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	276.43	274.44	266.94	72.82	72.82
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	811.24	536.80	269.86	197.04	124.22
Average normative loan	949.46	674.02	403.33	233.45	160.63
Weighted Average Rate of interest on actual loan	8.8185	8.7627	8.8196	8.9348	9.0931
Interest on normative loan	83.73	59.06	35.57	20.86	14.61
Pro rata interest on normative loan	83.73	59.06	35.57	20.86	14.61



Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Tra	ansmission Licensee	Power Grid Corpora	tion of India Limited						
Project	oject WRSS-XIII								
Element Description	1/(1) K V 1 V/ Rachall /P(±) =Vareana /(±E (()) alongwith accordated hav								
Region	Western Region	n DOCO Date Jan 8, 2015							

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2029
2024-25						-
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	2,940.97	0.00	2,940.97	2,940.97	5.28	155.28
Sub Station	2,097.62	0.00	2,097.62	2,097.62	5.28	110.75
Comm. Sys. excluding Fiber Optic	56.09	0.00	56.09	56.09	15.00	8.41
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	73.48	0.00	73.48	73.48	15.00	1.99
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	5,168.16	0.00	5,168.16	5,168.16	0.00	276.43
Weighted Average Rate of Depreciation(%)					5.348712	

2025-26					OD CORPO
Land(Freehold)	0.00	0.00	0.00	0.00	3,00

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Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	2,940.97	0.00	2,940.97	2,940.97	5.28	155.28
Sub Station	2,097.62	0.00	2,097.62	2,097.62	5.28	110.75
Comm. Sys. excluding Fiber Optic	56.09	0.00	56.09	56.09	15.00	8.41
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	73.48	0.00	73.48	73.48	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	5,168.16	0.00	5,168.16	5,168.16	0.00	274.44
Weighted Average Rate of Depreciation(%)					5.310207	

2026-27						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	2,940.97	0.00	2,940.97	2,940.97	5.28	155.28
Sub Station	2,097.62	0.00	2,097.62	2,097.62	5.28	110.75
Comm. Sys. excluding Fiber Optic	56.09	0.00	56.09	56.09	15.00	0.91
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	73.48	0.00	73.48	73.48	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	5,168.16	0.00	5,168.16	5,168.16	0.00	266.94
Weighted Average Rate of Depreciation(%)					5/165088	TATION I

2027-28						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	2,940.97	0.00	2,940.97	2,940.97	5.28	41.94
Sub Station	2,097.62	0.00	2,097.62	2,097.62	5.28	30.88
Comm. Sys. excluding Fiber Optic	56.09	0.00	56.09	56.09	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	73.48	0.00	73.48	73.48	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	5,168.16	0.00	5,168.16	5,168.16	0.00	72.82
Weighted Average Rate of Depreciation(%)					1.409012	

2028-29						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	2,940.97	0.00	2,940.97	2,940.97	5.28	41.94
Sub Station	2,097.62	0.00	2,097.62	2,097.62	5.28	30.88
Comm. Sys. excluding Fiber Optic	56.09	0.00	56.09	56.09	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	73.48	0.00	73.48	73.48	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	CORPOR 0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6 33	0.00
TOTAL	5,168.16		5,168.16 06	5,168.16	0.00	72.82

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Weighted Average Rate of Depreciation(%)		1.409012	

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Statement of Depreciation

Name of the	Transmission Licensee	Power Grid Corporati	on of India Limited	
Project	WRSS-XIII			D
Element Description	400 KV D/C Bachau (F	PG) -Versana (GETCO)	alongwith associa	ted bay
Region	Western Region		DOCO Date	Jan 8, 2015

				(Amount in Re	s. Lakn)
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	
1.1 Weighted Average useful life of the Asset/ Project	30.00	30.00	30.00	30.00	30.00
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)	21.00	20.00	19.00	18.00	17.00
Capital Base					
1.4 Opening capital cost	5,168.16	5,168.16	5,168.16	5,168.16	5,168.16
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	5,168.16	5,168.16	5,168.16	5,168.16	5,168.16
1.8 Average capital cost	5,168.16	5,168.16	5,168.16	5,168.16	5,168.16
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	73.48	73.48	73.48	73.48	73.48
1.11 Asset having 10% salvage value included in 1.8	5,094.68	5,094.68	5,094.68	5,094.68	5,094.68
1.12 Depreciable Value(1.10+90% of 1.11)	4,658.69	4,658.69	4,658.69	4,658.69	4,658.69
Depreciation for the period and Cum. Depreciation	il.	1,		GRIDC	ORPOR
1.13 Weighted Average Rate of depreciation	5.348712	5.310207	5.165088	1.400012	1.409012

1.14 Depreciation(for the period)	276.43	274.44	266.94	72.82	72.82
1.15 Depreciation(Annualised)	276.43	274.44	266.94	72.82	72.82
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	2,530.04	2,806.47	3,080.91	3,347.85	3,420.67
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	2,806.47	3,080.91	3,347.85	3,420.67	3,493.49



Name of the Tr	ransmission Licensee	Power Grid Corpora	tion of India Limited	d
Project	WRSS-XIII			
Element Description	400 KV D/C Bachau (PG)	-Versana (GETCO)	alongwith associat	ed bay
Region	Western Region		DOCO Date	Jan 8, 2015

(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	10.51	11.06	11.64	12.25	12.89
Maintenance spares 15% of O&M Expenses	18.92	19.91	20.95	22.05	23.21
Receivables equivalent to 45 days of AFC	97.72	95.23	92.25	66.88	67.27
Total Working capital	127.15	126.20	124.84	101.18	103.37
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	15.13	15.02	14.86	12.04	12.30
Pro rata interest on working capital	15.13	15.02	14.86	12.04	12.30



		Summary of issue in in the petition	volve	d PART-III FORM- 15
	me of the		D	0.110
2. Pet	ition Cate	gory		r Grid Corporation of India Limited
3. Tar	iff Period			mission
4. Na	me of the l	Project		24 and 2024-29 rn Region System Strengthening Scheme-XIII (WRSS-XIII)
5. Inv	estment A	pproval date	-	
s. SCC	DD of the I	Project	+-	
		f the project	-	
		- '	-	
No.	of Access	e scope is covered in the present petition.	Yes	
O No	of Assets	having time over run	1	
1 Ect	imated De	oject Cost as per IA	-	
		RCE? if so, provide the date	4993	
2. IS	riced Estim	nated Project Cost (if any)	yes	
4. Co	nant-ti-	nated Project Cost (if any)	6436	
		ost for all the assets covered in the instant petition. covered in instant petition and having cost overrun.	5168.16	5
16 17	Prayer in		<u> </u>	
18	Respond			
	-	Respondents		
	THE OX			
	I	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.		
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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	1
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	7
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.	V
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.
ORM-5A	Break-up of Construction/Supply/Service packages	N.A.
ORM-5B	Details of all the assets covered in the project	N.A.
ORM- 6	Actual Cash Expenditure and Financial Package up to COD	N.A.
ORM-7	Statement of Additional Capitalisation after COD	N.A.
ORM- 7A		N.A.
ORM- 7B	Financing of Additional Capitalisation	N.A.
	Statement of Additional Capitalisation during five year before the end of the useful life of the project.	N.A.
ORM- 8	Calculation of Return on Equity	4
ORM-8A	Details of Foreign Equity	N.A.
ORM-9	Details of Allocation of corporate loans to various transmission elements	
ORM-9A	Details of Project Specific Loans	N.A.
ORM-9B	Details of Foreign Joans	N.A.
ORM-9C	Calculation of Weighted Average Rate of Interest on Actual Loans	1
ORM-9D	Loans in Foreign Currency	
ORM-9E	Calculation of Interest on Normative Loan	N.A.
ORM-10	Calculation of Depreciation Rate on original project cost	1
ORM-10A	Statement of Depreciation	1
ORM-10B	Statement of De-apitalisation	N.A.
ORM- 11	Calculation of Interest on Working Capital	N.A.
ORM- 12	Details of time over run	N.A.
ORM- 12A	Incidental Expenditure during Construction	N.A.
ORM- 12B	Calculation of IDC & Financing Charges	N.A.
ORM- 13	Details of Initial spaces	N.A.
ORM- 14	Non-Tariff Income	N.A.
ORM-15	Summary of issue involved in the petition	1
ORM A	Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL	N.A.
ther Information/ Doc No.	Information/Document	
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association. &	Tic
	Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC)	N.A.
2	Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC) 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	Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC) 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. Copies of relevant loan Agreements	
3 4	Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC) 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. Copies of relevant loan Agreements Copies of the approval of Competent Authority for the Capital Cost and Financial package.	N.A.
3 4 5	Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC) 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. Copies of relevant loan Agreements Copies of the approval of Competent Authority for the Capital Cost and Financial package. Copies of the Equity participation agreements and necessary approval for the foreign equity.	N.A.
3 4	Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC) 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. Copies of relevant loan Agreements Copies of the approval of Competent Authority for the Capital Cost and Financial package.	N.A. N.A. Yes
3 4 5	Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC) 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. Copies of relevant loan Agreements Copies of the approval of Competent Authority for the Capital Cost and Financial package. Copies of the Equity participation agreements and necessary approval for the foreign equity.	N.A. Yes N.A.
3 4 5 6	Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC) 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. Copies of the new Transmission System & Communication System for the relevant years. Copies of relevant loan Agreements Copies of the approval of Competent Authority for the Capital Cost and Financial package. Copies of the Equity participation agreements and necessary approval for the foreign equity. Copies of the BPTA/TSA/PPA with the beneficiaries, if any 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 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 ie. 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 filling the latest available Cost Audit Report should be furnished.	N.A. Yes N.A. N.A.
3 4 5 6 7	Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC) 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. Copies of relevant loan Agreements Copies of the approval of Competent Authority for the Capital Cost and Financial package. Copies of the Equity participation agreements and necessary approval for the foreign equity. Copies of the BPTA/TSA/PPA with the beneficiaries, if any 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 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 ie. 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. 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. N.A. Yes N.A. N.A. N.A.
3 4 5 6	Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC) 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. Copies of relevant loan Agreements Copies of the approval of Competent Authority for the Capital Cost and Financial package. Copies of the Equity participation agreements and necessary approval for the foreign equity. Copies of the BPTA/TSA/PPA with the beneficiaries, if any 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 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 ie. 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. 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	N.A. Yes N.A. N.A. N.A. N.A.

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