

**BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. /TT/2024

IN THE MATTER OF: Petition for truing up of Transmission Tariff for 2019-24 and determination of Transmission Tariff for 2024-29 tariff block for **400 kV D/C Kakrapar APP-Navsari Transmission Line along with associated bays at Navsari GIS and 400 kV D/C Kakrapar APP-Vapi Transmission Line along with associated bays at Vapi Sub-station in the Western region** under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

Power Grid Corporation of India Ltd.

---PETITIONER

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

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

---RESPONDENT

Madhya Pradesh Power Management Company Ltd.,
Shakti Bhawan, Rampur,
Jabalpur - 482008.

And others

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

Place: Gurugram

DATED: 25.11.2024

REPRESENTED BY

**(Zafarul Hasan)
General Manager (Commercial)**



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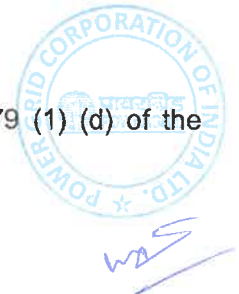
----- RESPONDENT(S)

And others

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To
The Secretary
Central Electricity Regulatory Commission
New Delhi 110016
Sir,

The present tariff Petition is filed under Section 62 read with Section 79 (1) (d) of the



Electricity Act, 2003 and under Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 and same may please be registered and taken on record by the Hon'ble Commission.

Place: Gurugram

FILED BY

DATED 25/11.2024

POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY


(Zafrul Hasan)

General Manager (Commercial)



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----- RESPONDENT(S)

And others

MEMO OF PARTIES

Power Grid Corporation of India Ltd.

--- PETITIONER

VERSUS

Western Region

--- RESPONDENT(S)

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

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



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

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

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

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

7. Nuclear Power Corporation of India Ltd.,
09-N-33, Vikram Sarabhai Bhavan,
Anushakti Nagar,
Mumbai-400094.

PETITIONER

POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

(Zafrul Hasan)

General Manager (Commercial)

PLACE: Gurugram

DATED: 11.11.2024



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And others

MEMO OF APPEARANCE

POWER GRID CORPORATION OF INDIA LTD.

--- PETITIONER

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



5. Shri Vishal Sagar, DGM (Commercial-Petition), POWERGRID
6. Shri Arjun Malhotra, Manager (Commercial-Petition), POWERGRID

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

IN WITNESS WHEREOF I have set and subscribed my hands to this writing on this 25th day of November 2024.

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.


(Zafrul Hasan)
General Manager (Commercial)

Place: Gurugram

DATED: 25.11.2024



**BEFORE
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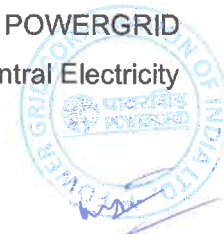
---- RESPONDENT(S)

And others

A. Executive Summary of the Petition:

1. Brief Background of the Petitioner

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, Own, Operate and Maintain an efficient, coordinated and economical inter-state transmission system ("**ISTS**"). POWERGRID operates and functions within the regulatory control of this Hon'ble Central Electricity



Regulatory Commission (hereinafter referred to as “**Hon’ble Commission**”). Tariff for the transmission system established by POWERGRID is required to be determined by this Hon’ble Commission in accordance with the Tariff Regulations as notified by this Hon’ble Commission from time to time in exercise of its powers under Section 178 of the Electricity Act, 2003.

2. Brief background of the Respondent(s):

POWERGRID has impleaded distribution licensees and Government departments of the respective States which are engaged in distribution of electricity in Southern Region of India. The respondents are also ‘Designated Inter State Transmission Customers (hereinafter referred to as ‘DICs’) from Western Region in terms of the 2020 Sharing Regulations.

3. Background of Transmission Assets:

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 **400 kV D/C Kakrapar APP-Navsari Transmission Line along with associated bays at Navsari GIS and 400 kV D/C Kakrapar APP-Vapi Transmission Line along with associated bays at Vapi Sub-station in the Western region as per following:**

Asset No	Asset Name	DOCO	Remarks
Asset	400 kV D/C Kakrapar APP-Navsari Transmission Line along with associated bays at Navsari GIS and 400 kV D/C Kakrapar APP-Vapi Transmission Line along with associated bays at Vapi Sub-station	29.06.2017	Tariff for true up of 2014-19 block and tariff for 2019-24 block approved under petition no. 15/TT/2020

4. Summary of Claims:

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 expenditure incurred/admitted upto



31.03.2019/DOCO and additional capital expenditure during 2019-24 & 2024-29 tariff blocks in accordance with provisions 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**”).

5. The details of FR/RCE apportioned approved cost vis-à-vis claimed capital cost as on COD/31.03.2019 and additional capital expenditure during 2019-24 and 2024-29 tariff block are as under:

Rs in lakhs

Asset No.	Apportioned Approved Cost as per FR	Expenditure Up to 31.03.2019	Expenditure during 2019-24 tariff block					Capital Cost as on 31.03.2024
			2019-20	2020-21	2021-22	2022-23	2023-24	
Asset	37871.21	31483.25	57.85	6.51	0.92	-79.41	6.58	31475.70

Rs in lakhs

Asset No.	Apportioned Approved Cost as per FR	Expenditure Up to 31.03.2024	Estimated expenditure during 2024-29 tariff block					Estimated completion Cost as on 31.03.2029
			2024-25	2025-26	2026-27	2027-28	2028-29	
Asset	37871.21	31475.70	28.05	-	-	-	-	31503.75

6. Details of tariff claimed are as under:

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

Rs in Lakhs

Name of the asset	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Asset	AFC approved	5354.39	5223.04	5098.77	4975.2	4848.57
	Revised AFC based on truing up	5,343.70	5,172.43	5,041.17	4,935.63	4,839.82

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	4,660.69	4,530.18	4,408.67	4,261.83	4,140.64

7. It is prayed to Hon'ble Commission to reimburse expenditure of petition filing fee, license fee, newspaper publication expenses and RLDC fee & charges etc.

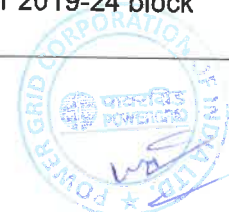
B. Detailed Petition:

MOST RESPECTFULLY SHOWETH:

(i) **Issue wise submission(s) with regards to expenditure claimed along with justification:**

8. The Petitioner herein, Power Grid Corporation of India Ltd ('POWERGRID') is a Government Company within the meaning of the Companies Act, 2013. POWERGRID is a deemed transmission licensee under Section 14 of the Electricity Act, 2003.
9. POWERGRID being transmission licensee is required to inter-alia Build, Own, Operate and Maintain an efficient, coordinated and economical interstate transmission system (ISTS). The tariff for the said transmission systems shall be determined by the Hon'ble Commission in accordance with the provisions of Tariff Regulations, 2019 and Tariff Regulations, 2024.
10. That the subject project/petition covers true up/approval of transmission tariff for following Asset:

Asset No	Asset Name	DOCO	Remarks
Asset	400 kV D/C Kakrapar APP-Navsari Transmission Line along with associated bays at Navsari GIS and 400 kV D/C Kakrapar	29.06.2017	Tariff for true up of 2014-19 block and tariff for 2019-24 block



APP-Vapi Transmission Line along with associated bays at Vapi Sub-station	approved under petition no. 15/TT/2020
----------------------------------------------------------------------------------	----------------------------------------

11. Cost detail:

The details of admitted cost for the assets covered in instant petition as per Hon'ble Commission order dated 15.02.2021 in petition no. 15/TT/2020 (Encl-1) for 2019-24 tariff block, and claimed cost now is given hereunder:

Cost allowed as per order in petition no. 15/TT/2020(A)								
Apportioned cost as per FR	Capital cost as on 31.03.2019	Add cap during 2019-24*						Capital cost as on 31.03.2024
		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	
37871.21	31480.30	59.98	-	-	-	-	-	31540.28
Cost claimed in the instant petition (B)								
37871.21	31483.25	57.85	6.51	0.92	-79.41	6.58	28.05	31503.75
Variation (B)-(A)	2.95	-2.13	6.51	0.92	-79.41	6.58	28.05	-36.53

* Add - Cap approved by the Commission in petition no: 15/TT/2020 were based on projections. In this regard it may be noted that while projecting the estimated add cap, contracts were not closed and liabilities were not finalized. However, in the instant true up petition, add cap is claimed on the basis of actual payments made to the contractor after receipt of final invoices from the contractor and incorporating the amendments. It is also submitted that the actual capital expenditure incurred by the petitioner after closing of contract may happen to be higher or lower than the estimated add cap prepared and submitted. It is further submitted that the payments were made after submission of the invoice and after reconciliation in accordance with the contractual clause as per provisions of contract. Further, Liability flow statement for is enclosed at **Encl-2**.

- 11.1 Initial spares:** Hon'ble Commission vide order dated 15.02.2021 in petition no. 15/TT/2021 disallowed excess initial spares of Rs 48.15 lakh from SS cost and Rs 60.65 Lakh from TL cost respectively. However, as per revised plant and machinery cost as



per Auditor Certificate dated 13.09.2024, initial spares are recalculated as tabulated below:

Details of the Initial spares claimed under subject project are as tabulated below:

Asset No.	Particulars	Allowable % Spares (X)	Total Cap. Cost for calculation of initial Spares (A)	Initial Spares Claimed (B)	Allowable Initial Spares C= (A-B)*X/(100-X)	Excess Initial Spares () [If B>C]
Asset	Sub-station	5	5029.20	294.49	249.20	45.29
	TL	1	23649.80	296.45	235.89	60.56

11.2 That the excess initial spares of Rs 105.85 lakh has been reduced from the capital cost upto 31.03.2019.

11.3 Details of the cost claimed in the instant petition w.r.t. Auditor Certificate is as detailed below:

Rs in Lakh

Sl. No	Expenditure	B & C Works	TL	S/S	PLCC	IT Equipment	Total
1	As per Auditor Certificate as on 31.03.2019	81.43	25881.31	5344.72	255.94	49.61	31613.01
2	Less: IDC Disallowed due to computational difference*	0.05	19.76	3.88	0.19	0.04	23.92
3	Less: excess initial spares	0.00	60.56	45.29	0.00	0.00	105.85
4	Total expenditure upto 31.03.2019	81.38	25800.99	5295.55	255.75	49.57	31483.24
5	Add Cap during 2019-20	0.00	21.23	36.62	0.00	0.00	57.85
6	Add Cap during 2020-21	0.00	5.92	0.59	0.00	0.00	6.51
7	Add Cap during 2021-22	0.00	0.72	0.20	0.00	0.00	0.92
8	Add Cap during 2022-23	0.00	-91.96	12.55	0.00	0.00	-79.41
9	Add Cap during 2023-24	0.00	1.80	4.78	0.00	0.00	6.58
10	Add Cap during 2024-25	0.00	28.05	0.00	0.00	0.00	28.05
11	Total Estimated Completion Cost	81.38	25766.75	5350.29	255.75	49.57	31503.74

*Hon'ble Commission vide order dated 15.02.2021 in petition no. 15/TT/2021 disallowed IDC of Rs 23.92 due to computational difference from the capital cost. The same has been reduced from the completion cost as on 31.03.2019.



Capital cost details for 2024-29 tariff block:

Rs in Lakhs

Asset Details	Apportioned cost as per FR	Expenditure as on 31.03.2024	Projected Add Cap 2024-29 as per auditor's certificate	Estimated completion cost as on 31.03.2029
			2024-29	
Asset	37871.21	31475.70	28.05	31503.75

Copy of auditor certificate w.r.t. claimed cost in the instant petition is enclosed at **Encl-3**. Hon'ble Commission is requested to kindly allow the cost claimed upto 31.03.2019

12. Additional capitalization claims under Regulation:

SI No.	Asset	DOCO/Effective DOCO date	Cutoff date
1.	Asset	29.06.2017	31.03.2020

Add cap for 2019-24 block:

Asset	Add cap details (Rs. Lakhs)				
	2019-20	2020-21	2021-22	2022-23	2023-24
	57.85	6.51	0.92	-79.41	6.58
Asset	Claimed under Regulation 24(1)(a) of the 2019 Tariff Regulations		Claimed under regulation 25(1)(d) of the 2019 Tariff Regulations (Undischarged liability for work done up to DOCO date)		

Add cap for 2024-29 block:

Asset	Add cap detail (Rs. Lakhs) .				
	2024-25	2025-26	2026-27	2027-28	2028-29
Asset	28.05				
	Claimed under regulation 25(1)(d) of the 2024 Tariff Regulations (Undischarged liability for work done up to DOCO date)				

13. Transmission tariff:

The truing up exercise for the period 2019-2024 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 Regulations, 2019. Regulation 13 of Tariff Regulations, 2019:



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 Regulations, 2019 dated 07.03.2019 in the truing up petition for 2019-24 tariff block.

Regulation 31 (3) of the Tariff Regulations, 2019:

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 have 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 Returns for 2023-24 will be filed in due course.

As such, basis of year wise effective tax rate and Grossed up ROE to be 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 has been trued up considering the above effective tax percentage to arrive at Grossed up ROE rate.

While filing Tariff petition for 2019-24 period, the petitioner had prayed for allowing the floating rate of Interest on loan adjustments. As per Hon'ble Commission order dated 15.02.2021 in 15/TT/2020, 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.

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

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

Rs in Lakh

Project	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Asset	AFC approved	5354.39	5223.04	5098.77	4975.2	4848.57
	Revised AFC based on truing up	5,343.70	5,172.43	5,041.17	4,935.63	4,839.82

Tariff filing formats along with the other relevant information and supporting documents are attached hereto as **Encl-4**.

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.

15. The tariff worked out for 2024-29 tariff block is summarized below:

Rs in Lakh

Project	Particular	2024-25	2025-26	2026-27	2027-28	2028-29
Asset	AFC	4,660.69	4,530.18	4,408.67	4,261.83	4,140.64

Tariff filing formats along with the other relevant information and supporting documents are attached hereto as **Encl-5**.

16. The asset will complete 12 Yrs of life after 2028-29 and thus depreciation till 2028-29 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. The details have been computed and are provided in Form- 10 A.

17. 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.

18. Under CGST Act, 2017 implemented w.e.f. 01.07.2017, the Govt. of India has exempted the charges of transmission of electricity vide notification no. 12/2017 – Central Tax (Rate) dated 28.06.2017 at serial no. 25 under the heading 9969 “Transmission or distribution of electricity by an electric transmission or distribution utility” by giving applicable GST rate as NIL. Hence, the Transmission Charges as indicated at para 14 & 15 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.

19. In the tariff calculations 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 calculations 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 has been submitted along with a Truing up petition with Diary No. 716/2024 These documents/details are also available on our website www.powergrid.in

20. The transmission charges at para 14 & 15 above are 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.



21. 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 Conditions 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 Conditions 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 for 2019-24 period. 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 for 2024-29 period as per actuals through a separate petition.

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

22. 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.

23. 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) & 94(4) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024. The fees and charges to be paid by the petitioner as ISTS licensee (deemed ISTS licensee) under CERC (Fees and Charges of RLDC and other matters) Regulations, 2023 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.
24. The Transmission Charges and other related Charges indicated at para 14 & 15 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.
25. **Sharing of Transmission Charges**

Truing up tariff for Transmission of Electricity (Annual Fixed Cost) for 2019-24 as per para 14 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 terms of Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 and Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020, as amended from time to time for the applicable periods.

Tariff for Transmission of Electricity (Annual Fixed Cost) for 2024-29 as per para 15 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 terms of Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020, as amended from time to time.

26. 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.-5 may please be treated as integral part of this petition.**

C. 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 14 and 15 above.
- b) Admit the capital cost claimed and additional capitalization incurred during 2019-24.
- 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 Regulations 2019 and Tariff Regulations, 2024 as per para 14 and 15 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 RLDC fees & charges and Licensee fee 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 21 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 21 above.
- i) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall capital spares as per actual as mentioned at Para 21 above.
- j) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition as mentioned at para 22 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.

Place: Gurugram
DATED: 25.11.2024

FILED BY
POWER GRID CORPORATION OF INDIA LTD.


REPRESENTED BY
(Zafrul Hasan)
General Manager (Commercial)



**BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO.:

IN THE MATTER OF: Petition for truing up of Transmission Tariff for 2019-24 and determination of Transmission Tariff for 2024-29 tariff block for **400 kV D/C Kakrapar APP-Navsari Transmission Line along with associated bays at Navsari GIS and 400 kV D/C Kakrapar APP-Vapi Transmission Line along with associated bays at Vapi Sub-station in the Western region** under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

Power Grid Corporation of India Ltd.

---PETITIONER

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

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

Madhya Pradesh Power Management Company Ltd.,
Shakti Bhawan, Rampur,
Jabalpur - 482008.

---- RESPONDENT(S)

And others

AFFIDAVIT VERIFYING THE PETITION

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



1. That the deponent is the General Manager in Petitioner and is well conversant with the facts and the circumstances of the case and therefore competent to swear this affidavit.
2. That the accompanying Petition under Section 62 of the Electricity Act, 2003, has been filed by my authorised representative/nominated counsel under my instruction and the contents of the same are true and correct to the best of my knowledge and belief.
3. That the contents of Para 01 to 26 of the facts as mentioned in the Petition are true and correct based on my personal knowledge, belief and records maintained in the office and the contents of Para 01 to 26 of the Petition are believed to be true on the basis of the legal advice received.
4. That the annexures annexed to the Petition are correct and true copies of the respective originals.
5. That the Deponent has not filed any other Petition or Appeal before any other forum or court of law with respect to the subject matter of the dispute

[Handwritten Signature]

(DEPONENT)

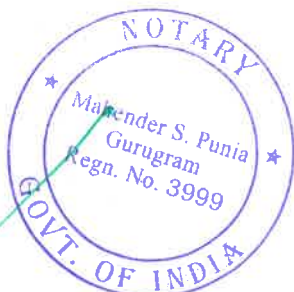
VERIFICATION

Solemnly affirmed at Gurugram on this ^{25th} day of November 2024 that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.

[Handwritten Signature]

(DEPONENT)

ATTESTED
28
MAHENDER S. PUNIA
ADVOCATE & NOTARY
Distt. Gurugram (Haryana) India



Ref: CC/Commercial/2024

Date: 28.08.2024


LETTER OF AUTHORIZATION

In reference to the POWER OF ATTORNEY dated 14.08.2024 and in supersession of letter of authorization dated 13.12.2022 I hereby authorize following executives to sign Petitions, Appeals, Vakalatnama, Affidavits, etc. and to represent POWERGRID before various forums/ courts / tribunals i.e Central Electricity Regulatory Commission, State Electricity Regulatory Commission, Appellate Tribunal for Electricity, High courts and Supreme Court etc. :

1. Sh. Mohd. Mohsin, Chief General Manager
2. Sh. V. C. Sekhar, Senior General Manager
3. Sh. Zafrul Hasan, General Manager

Further, following executives are authorised to represent cases before Central Electricity Regulatory Commission and Appellate Tribunal for Electricity

1. Sh. Angaru Naresh Kumar, Deputy General Manager
2. Smt. Suchitra Gautam, Deputy General Manager
3. Sh. Vishal Sagar, Deputy General Manager
4. Sh. G. Vijay, Deputy General Manager
5. Sh. Vivek Kumar Singh, Deputy General Manager
6. Sh. Amit Kumar Chachan, Deputy General Manager
7. Smt. Supriya Singh, Chief Manager (Law)
8. Sh. Arjun Malhotra, Manager (Law)
9. Smt. Tanushree Rao, Deputy Manager (Law)


28/08/2024
Dilip Nagesh Rozekar

Executive Director (Commercial & RC)

दिलीप रोझेकर / DILIPROZEKAR

Executive Director (Commercial & Regulatory Cell)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम) / (A Govt. of India Enterprise)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)



CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 15/TT/2020

Coram:

Shri I.S. Jha, Member
Shri Arun Goyal, Member

Date of Order: 15.02.2021

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 for the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for 400 kV D/C Kakrapar APP-Navsari Transmission Line along with associated bays at Navsari GIS and 400 kV D/C Kakrapar APP-Vapi Transmission Line along with associated bays at Vapi Sub-station in the Western region.

And in the matter of:

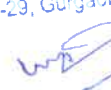

Power Grid Corporation of India Ltd.,
SAUDAMINI, Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

.....Petitioner

Versus

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.

 Order in Petition No.15/TT/2020

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Page No. - 30-75
Authorised Signatory
Power Grid Corporation of India Ltd.
Plot No.-2, Sector-29, Gurgaon-122001 (Haryana)
Page 1 of 46



4. Maharashtra State Electricity Distribution Co. Ltd.,
Hongkong Bank Building, 3rd Floor,
M.G. Road, Fort, Mumbai-400001.
5. Maharashtra State Electricity Transmission Co. Ltd.,
Prakashganga, 6th Floor, Plot No. C-19, E-Block,
Bandra Kurla Complex, Bandra (East) Mumbai-400051.
6. Gujarat Urja Vikas Nigam Ltd.,
Sardar Patel Vidyut Bhawan,
Racecourse Road, Vadodara-390007.
7. Electricity Department,
Government of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa-403001.
8. Electricity Department,
Administration of Daman & Diu,
Daman-396210.
9. DNH Power Distribution Corporation Ltd.,
Vidyut Bhawan, 66 kV Road, Near Secretariat Amla,
Silvassa-396230.
10. Chhattisgarh State Power Transmission Co. Ltd.,
State Load Despatch Building,
Dangania, Raipur-492013.
11. Chhattisgarh State Power Distribution Co. Ltd.,
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh-492013.
12. Nuclear Power Corporation of India Ltd.,
09-N-33, Vikram Sarabhai Bhavan,
Anushakti Nagar,
Mumbai-400094.

...Respondent(s)

For Petitioner: Shri S.S. Raju, PGCIL
Shri A.K. Verma, PGCIL
Shri. B. Dash, PGCIL
Shri. Abhay Choudhary, 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 tariff from COD to 31.3.2019 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of tariff for the period from 1.4.2019 to 31.3.2024 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of 400 kV D/C Kakrapar APP-Navsari Transmission Line along with associated bays at Navsari GIS and 400 kV D/C Kakrapar APP-Vapi Transmission Line along with associated bays at Vapi Sub-station under the transmission system associated with Kakrapar Atomic Power Project 3 & 4 in the Western Region (hereinafter referred to as “the transmission system”).

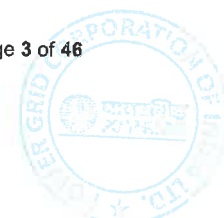
2. The Petitioner has made the following prayers:

“1) Allow the add cap for 2014-19 and 2019-24 tariff block as claimed as per Para 5 and 7 above.

2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 6 and 7 above.

3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before Hon’ble Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 5 and 6 above for respective block.

4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of



Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.

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

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

7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 6.6 above.

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

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

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

Background

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

a. The Investment Approval (IA) for the transmission system was accorded by the Board of Directors of the Petitioner Company on 26.2.2014 vide Memorandum No. C/CP/ Investment/KAPP 3 & 4 dated 4.3.2014 with an estimated cost of ₹37871 lakh including Interest During Construction (IDC) of ₹2425 lakh based on December, 2013 price level. The scope of work covered under the transmission system associated with the transmission system is as follows:

Transmission line

- i. Kakrapar APP-Navsari 400 kV D/C line
- ii. Kakrapar APP-Vapi 400 kV D/C line

Sub-stations:

- i. Extension of 400/220 kV Navsari GIS Sub-station



Order in Petition No.15/TT/2020



ii. Extension of 400/220 kV Vapi Sub-station

b. The transmission assets were scheduled to be put into commercial operation on 26.10.2016. However, they were put into commercial operation on 29.6.2017 after a time over-run of 8 months and 3 days. The time over-run was condoned. The Commission vide order dated 3.10.2018 in Petition No. 118/TT/2017 approved the tariff of the transmission assets for the period from COD to 31.3.2019.

c. As per agreement signed between the Petitioner and NPCIL dated 13.12.2004, Kakrapar Atomic Power Plant (KAPP-3&4; 2X700 MW) was scheduled to be implemented by NPCIL and the components of associated transmission system (ATS) for KAPP-3&4 were to be implemented by the Petitioner. NPCIL vide its letter dated 10.5.2016 intimated the Petitioner that KAPP-3 is scheduled to be put into commercial operation by November, 2017 and KAPP-4 thereafter. As per 41st SCM (Standing Committee Meeting) held on 21.12.2016, it was agreed that charging of Vapi-Kakrapar (KAPP)-Navsari 400 kV D/C line (using Kakrapar generation switchyard) could be taken up by the Petitioner after COD of the lines and switchyard bays at Kakrapar. Accordingly, as a contingency arrangement, the Petitioner charged the Vapi-Kakrapar (KAPP)-Navsari 400 kV D/C line (using Kakrapar generation switchyard).

d. The Petitioner has claimed the tried-up tariff for the transmission asset for the 2014-19 period as under:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 276 days)	2018-19
Annual Fixed Charge (AFC) approved vide order dated 3.10.2018 in Petition No. 118/TT/2017	4087.40	5622.86
AFC claimed by the Petitioner in the instant petition	4085.01	5599.01

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



Order in Petition No.15/TT/2020



Region.

5. The Petitioner has served the petition on the Respondents and notice of this petition has been published in newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No.1, has filed its reply vide affidavit dated 13.2.2020 and has raised issues of grossing up of RoE and variation in capital cost for the 2014-19 tariff period. The Petitioner, vide affidavit dated 18.5.2020, has filed rejoinder to the reply of MPPMCL. The issues raised by MPPMCL and the clarifications given by the Petitioner are considered in the relevant portions of this order.

6. This order is issued considering the submissions made by the Petitioner in the petition dated 6.11.2019, reply of MPPMCL dated 13.2.2020 and Petitioner's affidavits dated 11.5.2020, 18.5.2020 and 7.8.2020.

7. The hearing in this matter was held on 28.7.2020 through video conference and the order was reserved. 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 Period

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



(₹ in lakh)

Particulars	2017-18 (Pro-rata for 276 days)	2018-19
Depreciation	1157.62	1623.52
Interest on Loan	1213.95	1582.23
Return on Equity	1291.32	1816.11
Interest on Working Capital	95.39	130.70
O&M Expenses	326.73	446.45
Total	4085.01	5599.01

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

(₹ in lakh)

Particulars	2017-18 (Pro-rata for 276 days)	2018-19
O&M Expenses	36.01	37.20
Maintenance Spares	64.81	66.97
Receivables	900.38	933.17
Total Working Capital	1001.20	1037.34
Rate of Interest (%)	12.60	12.60
Interest on Working Capital	126.15	130.70
Interest on Working Capital (pro-rata)	95.39	130.70

Capital Cost as on the date of commercial operation

10. The capital cost of the transmission asset has been calculated in accordance with Regulation 9(2) of the 2014 Tariff Regulations.

11. The Commission vide order dated 3.10.2018 in Petition No. 118/TT/2017 had approved the capital cost as under:



Capital Cost claimed as on COD (A)	IDC disallowed as on COD due to computational difference (B)	Un-discharged IDC (C)	Excess Initial Spares disallowed (D)	Capital Cost allowed as on COD (E) = (A-B-C-D)
29811.92	23.66	1738.33	17.81	28032.12

12. MPPMCL submitted that the Commission vide its order dated 3.10.2018 in Petition No.118/TT/2017 for the tariff period 2014-19 approved the capital cost as on COD as ₹28032.12 lakh restricting IDC and excess Initial Spares. However, the Petitioner has considered the actual capital cost as ₹29811.92 lakh for arriving at the total cost as on 31.3.2019. In response, the Petitioner in its rejoinder dated 18.5.2020 has submitted a reconciliation table as under:

(₹ in lakh)				
Actual capital cost as on COD as per Auditor certificate (A)	Excess Initial Spares disallowed (B)	Accrual IDC discharged after COD (C)	Admitted cost as per CERC order D= (A)-(B)-(C)	Capital Cost as on COD claimed by Petitioner in the instant petition for calculation of tariff E=(A)-(C)
29811.92	17.81	1761.99	28032.12	28049.93

Interest during construction (IDC)

13. The Commission had allowed IDC of ₹2472.49 lakh after disallowing ₹23.66 lakh and directed the Petitioner to submit the interest rate for SBI loan and discharge of IDC liability at the time of true up of the 2014-19 tariff period in the order dated 3.10.2018 in Petition No. 118/TT/2017. The Petitioner has submitted the required information in the instant petition and claimed IDC of ₹2496.15 lakh for the transmission asset and has submitted the Auditor Certificate dated 2.8.2019 in support of the same.



14. On prudence check of the IDC computation, it is observed that there is mismatch in loan amount considered as on COD for IDC computation and submitted in Form 9C. Therefore, the loan amount as on COD submitted in Form-9C has been considered for computation of the IDC. The details of IDC claimed as per Auditor Certificate, IDC allowed, and IDC discharged is as follows:

(₹ in lakh)						
IDC claimed as per Auditor Certificate dated 2.8.2019	IDC disallowed due to computational difference	IDC allowed on accrual basis	IDC allowed on cash basis as on COD	Un-discharged IDC liability as on COD	Discharge of IDC liability allowed as ACE	
					2017-18	2018-19
2496.15	23.91	2472.24	734.16	1738.08	33.83	1704.25

Initial Spares

15. 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 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%”*

16. The Commission vide order dated 3.10.2018 in Petition No. 118/TT/2017 had allowed Initial Spares of ₹497.54 lakh and disallowed excess Initial Spares of ₹93.40 lakh. The Petitioner in the instant petition has claimed the total Initial Spares of ₹590.94 lakh and has submitted Auditor Certificate dated 2.8.2019 in support of the same. The Petitioner vide affidavit dated 11.5.2020 has submitted Form-13 stating that the sub-station is a brown-field sub-station. MPPMCL has submitted that the



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capital cost allowed in order dated 3.10.2018 in Petition No.118/TT/2017 may be considered.

17. We have considered the submissions made by MPPMCL and the Petitioner. The Petitioner in Petition No.118/TT/2017 had claimed Initial Spares for the sub-stations considering them as GIS Sub-stations and accordingly in order dated 3.10.2018 in Petition No.118/TT/2017, Initial Spares was approved for the sub-stations @5% as per the norms specified for GIS Sub-station in Regulation 13(d) of the 2014 Tariff Regulations. However, in the instant petition, the Petitioner has claimed Initial Spares @6% for the sub-stations considering them as brownfield sub-stations. We note that the transmission asset includes two sub-stations, i.e. Navsari GIS Sub-station and Vapi AIS Sub-station. The norms specified for GIS Sub-station and Brown-field Sub-station are 5% and 6% respectively in Regulation 13(d) of the 2014 Tariff Regulations. Hence, Initial Spares @6% cannot be allowed for Navsari GIS Sub-station. The Petitioner has not submitted the reasons for claiming Initial Spares @6% for the sub-stations when one of the sub-stations is a GIS Sub-station. We are of the view that the Initial Spares should be allowed individually on the basis of the nature of the sub-station and the norms specified in Regulation 13(d) of the 2014 Tariff Regulations. The Petitioner has neither submitted any reason for claiming higher rate of Initial Spares, nor made specific prayer to allow it nor has submitted the plant and machinery cost of the GIS Sub-station and the AIS Sub-station separately in this petition. Hence, we are not inclined to allow Initial Spares @6% as claimed by the Petitioner. As such, the Initial Spares allowed in order dated 3.10.2018 in Petition No.118/TT/2017 is allowed in this order which is as follows:

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(₹ in lakh)

Particulars	Plant and Machinery excluding IDC, IEDC, Land cost and cost of Civil works upto the cut-of date	Initial Spare claimed as per Auditor Certificate	Ceiling Limit (%)	Initial Spares computed as per norms	Excess Initial Spares disallowed	Initial Spares allowed in this order
	A	B	C	$D = \frac{(A-B) * C}{(100-C)}$		
Sub-station (GIS)	4974.92	294.49	5.00	246.34	48.15	246.34
Transmission Line	23641.11	296.45	1.00	235.80	60.65	235.80

18. The excess Initial Spares have been adjusted from respective year's Additional Capital Expenditure (ACE) based on the discharge pattern as under:

(₹ in lakh)

Period	Sub-station			Transmission Line		
	Claimed	Excess	Allowed	Claimed	Excess	Allowed
As on COD	278.97	32.63	246.34	205.62	0.00	205.62
2017-18	15.52	15.52	0.00	78.00	47.82	30.18
2018-19	0.00	0.00	0.00	12.83	12.83	0.00
Total	294.49	48.15	246.34	296.45	60.65	235.80

19. The details of the capital cost as on COD approved in the instant petition after adjustment of IDC and excess Initial Spares is as follows:

(₹ in lakh)

Capital Cost claimed as on COD on accrual basis (A)	Disallowed IDC due to computational difference (B)	Un-discharged IDC (C)	Excess Initial Spares Dis-allowed as on COD (D)	Capital Cost allowed as on COD on cash basis (E) = (A-B-C-D)
29811.92	23.91	1738.08	32.63	28017.30

Additional Capital Expenditure (ACE)

20. The Commission vide order dated 3.10.2018 in Petition No. 118/TT/2017 had allowed ACE of ₹1608.67 lakh and ₹2170.12 lakh for 2017-18 and 2018-19, respectively, towards un-discharged liabilities and works deferred for execution.



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Against this, the Petitioner has claimed ACE of ₹1676.28 lakh and ₹1826.16 lakh during 2017-18 and 2018-19 respectively, as un-discharged liabilities for works executed within the cut-off date for the transmission asset under Regulation 14(3)(v) of the 2014 Tariff Regulations. The details of ACE claimed by the Petitioner are as under:

(₹ in lakh)			
Particulars	Regulation	2017-18	2018-19
Discharge of Liabilities on hard cost	Regulation 14(1)(i)	0.00	110.82
ACE towards works deferred for execution (by addition into gross block)	Regulation 14(1)(ii)	1690.26	0.00
Discharge of IDC Liability	Regulation 14(1)(i)	33.83	1728.16
Total ACE claim		1724.09	1838.98
Less: Excess Initial Spares		47.81	12.83
Total ACE allowed for tariff		1676.28	1826.16

21. ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations, as it is towards balance and retention payments and balance work deferred for execution. The un-discharged IDC liability as well as un-discharged Initial Spares as on COD has been allowed as ACE during the year of its discharge. The excess Initial Spares have also been adjusted to arrive at ACE for 2017-18 and 2018-19. Further, disallowed IDC liability has been adjusted with ACE of 2018-19. ACE allowed from COD to 31.3.2019 in respect of the transmission asset is as under:

(₹ in lakh)			
Particulars	Regulation	2017-18	2018-19
Discharge of Liabilities on hard cost	Regulation 14(1)(i)	0.00	110.82
ACE towards works deferred for execution (by addition into gross block)	Regulation 14(1)(ii)	1690.26	0.00
Discharge of IDC Liability	Regulation 14(1)(i)	33.83	1704.25
Total ACE allowed		1724.09	1815.08



Less: Excess Initial Spares		63.35	12.83
Total ACE allowed for tariff		1660.74	1802.25

22. Accordingly, the capital cost considered for the 2014-19 tariff period is as under:

Admitted Capital Cost as on COD	ACE		Total Capital Cost as on 31.3.2019
	2017-18	2018-19	
28017.30	1660.74	1802.25	31480.29

Debt-Equity ratio

23. The Petitioner has claimed debt-equity ratio of 70:30 as on the date of commercial operation. Further, the Petitioner has also submitted that equity infused during 2014-19 is not less than 30%. Accordingly, the debt-equity ratio of 70:30 as per Regulation 19 of the 2014 Tariff Regulations has been considered. 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 are as under:

Funding	Capital Cost as on COD (₹ in lakh)	(%)	ACE (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	19612.11	70.00	2424.09	70.00	22036.20	70.00
Equity	8405.19	30.00	1038.90	30.00	9444.09	30.00
Total	28017.30	100.00	3462.99	100.00	31480.29	100.00

Depreciation

24. The Petitioner's claim towards depreciation in this petition was found to be higher than the depreciation allowed for the transmission asset in order dated 3.10.2018 in Petition No. 118/TT/2017. The Petitioner has neither given any justification for claiming higher depreciation than that allowed earlier in order dated 3.10.2018 nor made any specific prayer for allowing higher depreciation in this



petition. Similar issue had come up in Petition No. 19/TT/2020, wherein the Commission vide order dated 9.5.2020 held as under:

"31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012 and 9.5.2013 in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014-19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations(the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred up to 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 up to 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."

25. In line with the above said order dated 9.5.2020 in Petition No. 19/TT/2020, the depreciation has been considered @5.28% 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. The calculation of weighted average rate of depreciation (WAROD) is placed in Annexure-1. The Gross Block during the tariff period 2014-19 has been depreciated at WAROD (Annexure-I). WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and the trued up depreciation allowed during the 2014-19 tariff period is as under:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 276 days)	2018-19
Depreciation		
Opening Gross Block	28017.30	29678.04
ACE	1660.74	1802.25
Closing Gross Block	29678.04	31480.29
Average Gross Block	28847.67	30579.16
Weighted Average Rate of Depreciation (%)	5.28	5.28
Balance useful life of the asset	33	33
Elapsed life at the beginning of the year	0	0
Aggregated Depreciable Value	25962.90	27521.24
Depreciation during the year	1152.57	1615.65
Cumulative Depreciation	1152.57	2768.22
Remaining Aggregate Depreciable Value	24810.33	24753.02

26. The details of the depreciation approved in order dated 3.10.2018 in Petition No. 118/TT/2017, claimed by the Petitioner in the instant petition and trued up in this order is shown as follows:

Particulars	₹ in lakh)	
	2017-18 (Pro-rata for 276 days)	2018-19
Approved vide order dated 3.10.2018 in Petition No. 118/TT/2017	1152.16	1623.50
Claimed by the Petitioner in the instant petition	1157.62	1623.52
Allowed after true-up in this order	1152.57	1615.65

Interest on Loan (IoL)

27. The Petitioner has claimed the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based



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on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. Trued up IoL allowed for the transmission asset is as under:

(₹ in lakh)		
Particulars	2017-18 (Pro-rata for 276 days)	2018-19
Interest on Loan		
Gross Normative Loan	19612.11	20774.62
Cumulative Repayments up to Previous Year	0.00	1152.57
Net Loan-Opening	19612.11	19622.06
Additions	1162.52	1261.58
Repayment during the year	1152.57	1615.65
Net Loan-Closing	19622.06	19267.98
Average Loan	19617.08	19445.02
Weighted Average Rate of Interest on Loan (%)	8.1730	8.1231
Interest on Loan	1212.37	1579.53

28. The details of IoL approved in order dated 3.10.2018 in Petition No. 118/TT/2017, claimed by the Petitioner in the instant petition and trued up in this order is shown in the table below:

(₹ in lakh)		
Particular	2017-18 (Pro-rata for 276 days)	2018-19
Approved vide order dated 3.10.2018 in Petition No. 118/TT/2017	1230.54	1614.11
Claimed by the Petitioner in the instant petition	1213.95	1582.23
Allowed after true-up in this order	1212.37	1579.53

Return on Equity (RoE)

29. The Petitioner has claimed RoE for the transmission asset in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed 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	19.625
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

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

31. We have considered the submissions of the Petitioner and MPPMCL. The Commission vide order dated 2.2.2021 in Petition No. 312/TT/2020 has already dealt with the concerns of MPPMCL. The relevant paragraph of the order are extracted as under:

"39. We have considered the submissions of the Petitioner and MPPMCL. As regards MPPMCL's contention, it is observed that the Petitioner has submitted the assessment

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orders issued by the Income Tax Department for the years 2014-15, 2015-16 and 2016-17 and the Income Tax returns filed by the Petitioner for years 2017-18 and 2018-19. The Petitioner has submitted the documents pointed out by MPPMCL.”

32. The Commission, vide order dated 27.4.2020 in Petition No.274/TT/2019, had arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is given in the table below. The relevant portion of the order dated 27.4.2020 is as under:

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

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

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

“

33. The same MAT rates as considered in the above-mentioned order 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 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

34. 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 as per the above said Regulation. RoE is trued up on the basis of the MAT rate applicable for the respective years and is allowed as follows:

(₹ in lakh)

Particulars	2017-18 (Pro-rata for 276 days)	2018-19
Return on Equity		
Opening Equity	8405.19	8903.41
Additions	498.22	540.68
Closing Equity	8903.41	9444.09
Average Equity	8654.30	9173.75
Return on Equity (Base Rate) (%)	15.500	15.500
MAT Rate for respective year (%)	21.342	21.549
Rate of Return on Equity (%)	19.705	19.758
Return on Equity	1289.54	1812.50

35. Details of RoE approved in order dated 3.10.2018 in Petition No. 118/TT/2017, claimed by the Petitioner in the instant petition and trued up in this order are as under:

(₹ in lakh)

Particular	2017-18 (Pro-rata for 276 days)	2018-19
Approved vide order dated 3.10.2018 in Petition No. 118/TT/2017	1282.79	1807.60
Claimed by the Petitioner in the instant petition	1291.32	1816.11



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Allowed after true-up in this order	1289.54	1812.50
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Operation & Maintenance Expenses (O&M Expenses)

36. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The O&M Expenses claimed by the Petitioner for the various elements included in the transmission asset are as follows:

Particulars	2017-18 (Pro-rata for 276 days)	2018-19
400 kV: Vapi-Kakrapar bay		
No. of bays	2	2
Norms (₹ lakh/Bay)	66.51	68.71
400 kV GIS: Navsari-Kakrapar bay		
No. of bays	2	2
Norms (₹ lakh/Bay)	56.84	58.73
Transmission line: Vapi-Kakrapar-Navsari		
D/C Bundled (4 or more sub-conductors)	151.18	151.18
Norms (₹ lakh/km)	1.171	1.21
Multi Ckt Bundled with 4 or more sub-conductors	4.07	4.07
Norms (₹ lakh/km)	2.055	2.123
Total O&M Expenses (₹ in lakh)	432.10	446.45
Total O&M Expenses (₹ in lakh) (pro-rata)	326.73	446.45

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

Particulars	2017-18	2018-19
Norms for sub-station Bays (₹ lakh per bay)		
400 kV		
Norms (₹ lakh/Bay)	66.51	68.71
400 kV GIS		
Norms (₹ lakh/Bay)	56.84	58.73
Transmission line		
D/C Bundled(4 or more sub-conductors)		
Norms (₹ lakh/km)	1.171	1.21
Multi Ckt Bundled with 4 or more sub-		



conductors		
Norms (₹ lakh/km)	2.055	2.123

38. We have considered the submission of the Petitioner. The O&M Expenses are allowed for the transmission asset as per the norms specified in the 2014 Tariff Regulations and are as under:

Particulars	2017-18 (Pro-rata for 276 days)	2018-19
400 kV: Vapi-Kakrapar bay		
No. of bays	2	2
Norms (₹ lakh/Bay)	66.51	68.71
400 kV GIS: Navsari-Kakrapar bay		
No. of bays	2	2
Norms (₹ lakh/Bay)	56.84	58.73
Transmission line: Vapi-Kakrapar-Navsari (km)		
D/C Bundled(4 or more sub-conductors)	151.18	151.18
Norms (₹ lakh/km)	1.171	1.21
Multi Ckt Bundled with 4 or more sub-conductors	4.07	4.07
Norms (₹ lakh/km)	2.055	2.123
Total O&M Expenses (₹ in lakh)	326.74	446.45

39. The details of the O&M Expenses approved in order dated 3.10.2018 in Petition No. 118/TT/2017, claimed by the Petitioner in the instant petition and trued up in the instant order is shown in the table as under:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 276 days)	2018-19
Approved vide order dated 3.10.2018 in Petition No. 118/TT/2017	326.47	446.45
Claimed by the Petitioner in the instant petition	326.73	446.45
Allowed after true-up in this order	326.74	446.45

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:

(₹ in lakh)



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Particulars	2017-18 (Pro-rata for 276 days)	2018-19
O&M Expenses	36.01	37.20
Maintenance Spares	64.81	66.97
Receivables	898.49	930.76
Total Working Capital	999.31	1034.93
Rate of Interest (%)	12.60	12.60
Interest on Working Capital	95.21	130.40

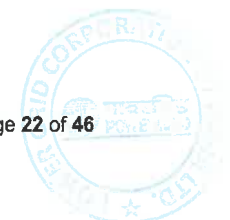
41. Details of IWC approved vide order dated 3.10.2018 in Petition No. 118/TT/2017, IWC claimed by the Petitioner in the instant petition and as trued up in this order are shown in the table as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 276 days)	2018-19
Approved vide order dated 3.10.2018 in Petition No. 118/TT/2017	95.43	131.21
Claimed by the Petitioner in the instant petition	95.39	130.70
Allowed after true-up in this order	95.21	130.40

Approved Annual Fixed Charges for the 2014-19 Tariff Period

42. The trued up annual fixed charges for the instant transmission asset for the 2014-19 period is summarised as under:

Particulars/ Asset	(₹ in lakh)	
	2017-18 (Pro-rata for 276 days)	2018-19
Depreciation	1152.57	1615.65
Interest on Loan	1212.37	1579.53
Return on Equity	1289.54	1812.50
Interest on Working Capital	95.21	130.40
O&M Expenses	326.74	446.45
Total	4076.42	5584.54



43. The Annual Transmission Charges approved vide order dated 3.10.2018 in Petition No. 118/TT/2017, claimed by the Petitioner in the instant petition and approved after trueing up in this order is shown as under:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 276 days)	2018-19
Approved vide order dated 3.10.2018 in Petition No. 118/TT/2017	4087.40	5622.86
Claimed by the Petitioner in the instant petition	4085.01	5599.01
Allowed after true-up in this order	4076.42	5584.54

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

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	1673.48	1675.06	1675.06	1675.06	1674.95
Interest on Loan	1505.31	1366.42	1231.69	1097.17	959.53
Return on Equity	1779.54	1781.23	1781.23	1781.23	1781.23
Interest on Working Capital	88.67	87.33	85.81	84.30	82.56
O&M Expenses	323.73	334.85	346.43	358.46	370.78
Total	5370.73	5244.89	5120.22	4996.22	4869.05

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	26.98	27.90	28.87	29.87	30.90
Maintenance Spares	48.56	50.23	51.96	53.77	55.62
Receivables	660.34	646.63	631.26	615.97	598.65
Total Working Capital	735.88	724.76	712.09	699.61	685.17
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	88.67	87.33	85.81	84.30	82.56

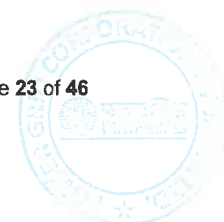
Capital Cost

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



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

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

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
- (k) *Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) *Expenditure on account of change in law and force majeure events; and*
- (o) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

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

- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly 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 renovation and modernisation as admitted by this Commission in accordance with these regulations;
 - (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
 - (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (4) The capital cost in case of existing or new hydro generating station shall also include:
- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
 - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (5) The following shall be excluded from the capital cost of the existing and new projects:
- (a) The assets forming part of the project, but not in use, as declared in the tariff petition;
 - (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.

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



47. The capital cost of ₹31552.37 lakh as on 31.3.2019 has been claimed by the Petitioner against which the Commission allowed ₹31480.29 lakh as on 31.3.2019 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)

48. Regulation 24 of the 2019 Tariff Regulations provides as under:

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

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

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

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.

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

49. The Petitioner has claimed ACE of ₹59.98 lakh for the 2019-24 period under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations on account of undischarged liability towards final payment for works executed and for works deferred for execution within cut-off date.

50. We have considered the submissions of the Petitioner. ACE claimed by the Petitioner has been allowed under Regulation 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations, as it is towards un-discharged liabilities recognised to be payable at a future date and balance work deferred for execution. The total capital expenditure as on 31.3.2024 is within the apportioned approved cost of ₹37871.21 lakh. Accordingly, ACE for 2019-20 and the capital cost as on 31.3.2024 for the transmission asset considered are as under:

(₹ in lakh)		
Capital Cost admitted as on 1.4.2019	ACE for	Capital Cost allowed as on 31.3.2024
	2019-20	
31480.29	59.98	31540.27

Debt-Equity ratio

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

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

Provided that:

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

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

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



generating station or the transmission system including communication system, as the case may be.

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

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;

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

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

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

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

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	ACE 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	22036.20	70.00	41.99	70.00	22078.19	70.00
Equity	9444.09	30.00	17.99	30.00	9462.08	30.00
Total	31480.29	100.00	59.98	100.00	31540.27	100.00

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 de-capitalized asset during its useful services."

54. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD) (as placed in Annexure-II). WAROD has been worked out after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100 per cent depreciable. The calculation of WAROD for the 2019-24 period is placed in Annexure-II. 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:

	(₹ in lakh)				
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	31480.29	31540.27	31540.27	31540.27	31540.27
Addition during the year 2019-24 due to projected ACE	59.98	0.00	0.00	0.00	0.00
Closing Gross Block	31540.27	31540.27	31540.27	31540.27	31540.27
Average Gross Block	31510.28	31540.27	31540.27	31540.27	31540.27
Weighted average rate of Depreciation (WAROD) (%)	5.30	5.30	5.30	5.30	5.30
Balance useful life at the beginning of the year	32	31	30	29	28
Elapsed Life	1	2	3	4	5
Aggregated Depreciable Value	28364.21	28391.20	28391.20	28391.20	28391.20
Depreciation during the year	1669.67	1671.25	1671.25	1671.25	1671.25
Aggregate Cumulative Depreciation	4437.89	6109.14	7780.39	9451.64	11122.89
Remaining Aggregated Depreciable Value	23926.32	22282.06	20610.81	18939.56	17268.31

Interest on Loan (IoL)

55. 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.”*

56. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period may be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the



time of true up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the transmission asset is as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	22036.21	22078.19	22078.19	22078.19	22078.19
Cumulative Repayments upto Previous Year	2768.22	4437.89	6109.14	7780.39	9451.64
Net Loan-Opening	19267.98	17640.30	15969.05	14297.80	12626.55
Additions	41.99	0.00	0.00	0.00	0.00
Repayment during the year	1669.67	1671.25	1671.25	1671.25	1671.25
Net Loan-Closing	17640.30	15969.05	14297.80	12626.55	10955.30
Average Loan	18454.14	16804.68	15133.42	13462.17	11790.92
Weighted Average Rate of Interest on Loan (%)	8.1413	8.1158	8.1238	8.1354	8.1238
Interest on Loan	1502.40	1363.83	1229.41	1095.21	957.87

Return on Equity (RoE)

57. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provides as under:

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

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope 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:
- rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
 - an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

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

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

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

Illustration-

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

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

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

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

- (b) Estimated Advance Tax for the year on above is Rs 240 crore;
(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;
(d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

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

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	9444.09	9462.08	9462.08	9462.08	9462.08
Additions	17.99	0.00	0.00	0.00	0.00
Closing Equity	9462.08	9462.08	9462.08	9462.08	9462.08
Average Equity	9453.08	9462.08	9462.08	9462.08	9462.08
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	1775.43	1777.12	1777.12	1777.12	1777.12

Operation & Maintenance Expenses (O&M Expenses)

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
400 kV: Vapi-Kakrapar bay					
No. of bays	2	2	2	2	2
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91



400 kV GIS: Navsari-Kakrapar bay					
No. of bays	2	2	2	2	2
Norms (₹ lakh/Bay)	22.505	23.296	24.115	24.962	25.837
Transmission line: Vapi-Kakrapar-Navsari (151.18 km)					
D/C Bundled (4 or more sub-conductors)	151.18	151.18	151.18	151.18	151.18
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
Multi Ckt Bundled with 4 or more sub-conductors	4.07	4.07	4.07	4.07	4.07
Norms (₹ lakh/km)	2.319	2.401	2.485	2.572	2.662
PLCC					
Cost	255.94	255.94	255.94	255.94	255.94
Norms (₹ lakh)	2.0% of the original project cost related to such communication system				
Total O&M expense (₹ in lakh)	323.73	334.85	346.43	358.46	370.78

60. Regulations 35(3) and (4) of the 2019 Tariff Regulations provides as follows:

“35. Operation and Maintenance Expenses:

...

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289



Double Circuit (Bundled conductor with four or more sub-conductor)	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:

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

expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;

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

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

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

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

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

61. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition. 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 Tariff Regulation and the 2019 Tariff Regulations and the norms for sub-station have 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

 Order in Petition No.15/TT/2020

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Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. The relevant portions of the order dated 24.1.2021 in Petition No.126/TT/2020 are extracted hereunder:

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

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

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

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

62. The O&M Expenses allowed as per the norms specified in the 2019 Tariff Regulations for the transmission assets is as under:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
400 kV: Vapi-Kakrapar bay					
No. of bays	2	2	2	2	2
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
400 kV GIS: Navsari-Kakrapar bay					
No. of bays	2	2	2	2	2
Norms (₹ lakh/Bay)	22.505	23.296	24.115	24.962	25.837
Transmission line: Vapi-Kakrapar-Navsari (km)					
D/C Bundled (4 or more sub-conductors)	151.18	151.18	151.18	151.18	151.18
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
Multi Ckt Bundled with 4 or more sub-conductors	4.07	4.07	4.07	4.07	4.07
Norms (₹ lakh/km)	2.319	2.401	2.485	2.572	2.662
Total O&M Expenses (₹ in lakh)	318.61	329.74	341.31	353.34	365.67

Interest on Working Capital (IWC)

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

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

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

- (i) Cost of coal or lignite and limestone towards stock, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;
- (ii) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;
- (iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;
- (iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;
- (v) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and
- (vi) Operation and maintenance expenses, including water charges and security expenses, for one month.

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

- (i) Fuel cost for 30 days corresponding to the normative annual plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;



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

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

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

(2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:

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

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

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

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

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

'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;"

64. 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%.

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	26.55	27.48	28.44	29.45	30.47
Maintenance Spares	47.79	49.46	51.20	53.00	54.85
Receivables	658.33	643.94	628.62	613.38	596.14
Total Working Capital	732.67	720.88	708.26	695.83	681.46
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	88.29	81.10	79.68	78.28	76.66

Annual Fixed Charges of the 2019-24 Tariff Period

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	1669.67	1671.25	1671.25	1671.25	1671.25
Interest on Loan	1502.40	1363.83	1229.41	1095.21	957.87
Return on Equity	1775.43	1777.12	1777.12	1777.12	1777.12
Interest on Working Capital	88.29	81.10	79.68	78.28	76.66
O & M Expenses	318.61	329.74	341.31	353.34	365.67
Total	5354.39	5223.04	5098.77	4975.20	4848.57



Filing Fee and the Publication Expenses

67. 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

68. 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.

Security Expenses

69. The Petitioner has submitted that 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 shall 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.

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

Goods and Services Tax

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

72. We have considered the submission of the Petitioner. Since GST is not levied on transmission service at present, we are of the view that Petitioner's prayer is premature.

Capital Spares

73. 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.

 Order in Petition No.15/TT/2020



Sharing of Transmission Charges

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

75. To summarise, the trued-up Annual Fixed Charges allowed for the transmission asset for the years 2017-19 in the 2014-19 tariff period are as under:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata 276 days)	2018-19
Annual Fixed Charges	4076.42	5584.54

The Annual Fixed Charges allowed for the transmission asset for the 2019-24 tariff period are as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	5354.39	5223.04	5098.77	4975.20	4848.57

76. This order disposes of Petition No. 15/TT/2020.

Sd/
(Arun Goyal)
Member

Sd/
(I. S. Jha)
Member

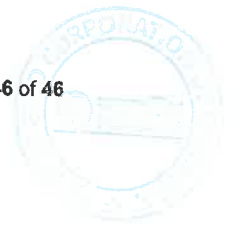
Annexure-I

2014-19	Admitted Capital Cost as on 29.6.2017(COD) (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)	
Particulars		2017-18	2018-19			2017-18	2018-19
Building Civil Works & Colony	61.99	15.62	3.77	81.37	3.34%	2.33	2.65
Transmission Line	23185.58	1155.31	1460.00	25800.89	5.28%	1254.70	1323.74
Sub Station	4502.92	467.50	322.27	5292.69	5.28%	250.10	270.95
PLCC	220.13	22.25	13.37	255.76	6.33%	14.64	15.77
IT Equipment (Incl. Software)	46.68	0.06	2.84	49.57	5.28%	2.47	2.54
Total	28017.30	1660.74	1802.25	31480.29		1524.23	1615.65
Average Gross Block						28847.67	30579.16
Weighted Average Rate of Depreciation						5.28%	5.28%

Annexure-II

2019-24 Particulars	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh) 2019-20	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciations as per Regulations (₹ in lakh)				
					2019-20	2020-21	2021-22	2022-23	2023-24
Building Civil Works & Colony	81.38	0.00	81.38	3.34%	2.72	2.72	2.72	2.72	2.72
Transmission Line	25800.90	54.36	25855.26	5.28%	1363.72	1365.16	1365.16	1365.16	1365.16
Sub Station	5292.69	5.62	5298.31	5.28%	279.60	279.75	279.75	279.75	279.75
PLCC	255.75	0.00	255.75	6.33%	16.19	16.19	16.19	16.19	16.19
IT Equipment (Incl. Software)	49.57	0.00	49.57	15.00%	7.44	7.44	7.44	7.44	7.44
Total	31480.29	59.98	31540.27		1669.67	1671.25	1671.25	1671.25	1671.25
Average Gross Block					31510.28	31540.27	31540.27	31540.27	31540.27
Weighted Average Rate of Depreciation					5.30%	5.30%	5.30%	5.30%	5.30%

WS



Liability Flow Statement												
POWERGRID												
400 KV D/C Kakrajpar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrajpar APP-Vapi T/L along with associated bays at Vapi S/S												
DOCO: 29.07.2017												
Asset No	Particulars ^a	Year of Actual Capitalisation	Outstanding Liability as on COD	Discharge					Outstanding Liability as on 31.3.2024	Discharge		Outstanding Liability as on 31.3.2023
				2019-20	2020-21	2021-22	2022-23	2023-24		Total (2019-24)	2024-25 Projected	
				Due to Unexecuted work								
	Building & Civil Works	2017	-	-	-	-	-	-	-	-	-	-
	Transmission Line	2017	-	-	-	(92.96)	-	-	-	-	-	-
	Sub Station	2017	-	-	-	-	-	-	-	-	-	-
	PLCC/OPGW	2017	-	-	-	-	-	-	-	-	-	-
	I. T. Equipment including s	2017	-	-	-	-	-	-	-	-	-	-
				Due to discharge of liability								
	Building & Civil Works	2017	-	-	-	-	-	-	-	-	-	-
	Transmission Line	2017	58.71	21.23	5.91	0.72	1.00	1.80	30.66	28.05	28.05	28.05
	Sub Station	2017	54.76	36.63	0.59	0.20	12.55	4.78	54.76	-	-	-
	PLCC/OPGW	2017	-	-	-	-	-	-	-	-	-	-
	I. T. Equipment including s	2017	-	-	-	-	-	-	-	-	-	-
			113.47	57.85	6.51	0.92	13.55	6.58	85.42	28.05	28.05	28.05

WAS



G.D. Apte & Co.
Chartered Accountants

Certificate

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost for "400 kV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 kV D/C Kakrapar APP-Vapi T/L along with associated bays at Vapi S/S" under project "Transmission System associated with Kakrapar Atomic Power Project 3 & 4" in WR-II Region of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 29.06.2017 is detailed as under:

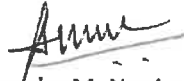
(Rs. in Lakhs)

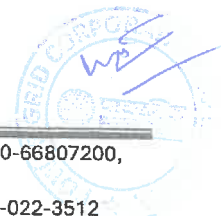
S/N	Particulars	Capital Cost	IEDC	IDC	Total
1	Expenditure upto to 31.03.2019	28625.37	491.49	2496.15	31613.01
2	Expenditure from 01.04.2019 to 31.03.2020	57.85	0.00	0.00	57.85
3	Expenditure from 01.04.2020 to 31.03.2021	6.51	0.00	0.00	6.51
4	Expenditure from 01.04.2021 to 31.03.2022	0.92	0.00	0.00	0.92
5	Expenditure from 01.04.2022 to 31.03.2023	-79.41	0.00	0.00	-79.41
6	Expenditure from 01.04.2023 to 31.03.2024	6.58	0.00	0.00	6.58
7	Estimated Expenditure from 01.04.2024 to 31.03.2025	28.05	0.00	0.00	28.05
	Total	28645.87	491.49	2496.15	31633.51

We certify that we have verified the expenditure up to 31-03-2024 as referred above on the basis of the information drawn from the audited Statement of Accounts of Power Grid Corporation of India Ltd. WR-II as on 31-03-2024.

The estimated expenditure is based on Management estimate.

For G.D. Apte & Co.
Chartered Accountants
Firm Registration Number: 100 515W
UDIN: 24121007BKCKUI6799


Anagha M. Nanivadekar
Partner
Membership Number: 121007
Pune, September 13, 2024



Pune Office: GDA House, Plot No. 85, Right Bhusari Colony, Paud Road, Kothrud, Pune 411 038. Phone: 020-66807200,
Email: audit@gdaca.com
Mumbai Office: D-509 Neelkanth Business Park, Nathani Road, Vidyavihar (West) Mumbai 400086, Phone-022-3512 3184

G.D. Apte & Co.
Chartered Accountants

Certificate

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost for "400 kV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 kV D/C Kakrapar APP-Vapi T/L along with associated bays at Vapi S/S" under project "Transmission System associated with Kakrapar Atomic Power Project 3 & 4" in WR-II Region of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 29.06.2017 is detailed as under:

(Rs. in Lakhs)

S/N	Particulars	Land	Building and Civil Works	Tr. Line	Sub-Station	PLCC/ Communication System	I. T Equipment including software	Total
1	Expenditure upto to 31.03.2019	0.00	81.43	25881.31	5344.72	255.94	49.61	31613.01
2	Expenditure from 01.04.2019 to 31.03.2020	0.00	0.00	21.23	36.62	0.00	0.00	57.85
3	Expenditure from 01.04.2020 to 31.03.2021	0.00	0.00	5.92	0.59	0.00	0.00	6.51
4	Expenditure from 01.04.2021 to 31.03.2022	0.00	0.00	0.72	0.20	0.00	0.00	0.92
5	Expenditure from 01.04.2022 to 31.03.2023	0.00	0.00	-91.96	12.55	0.00	0.00	-79.41
6	Expenditure from 01.04.2023 to 31.03.2024	0.00	0.00	1.80	4.78	0.00	0.00	6.58
7	Estimated Expenditure from 01.04.2024 to 31.03.2025	0.00	0.00	28.05	0.00	0.00	0.00	28.05
	Total	0.00	81.43	25847.07	5399.46	255.94	49.61	31633.51

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Email: audit@gdaca.com

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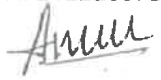
G.D. Apte & Co.
Chartered Accountants

S/N	Particulars	TL	Sub-station/ PLCC/ IT Equipment
1	Total Cost (Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of Civil works for the purpose of Initial Spares)	23649.80	5029.20
2	Initial Spares included above	296.45	294.49

We certify that we have verified the expenditure up to 31-03-2024 as referred above on the basis of the information drawn from the audited Statement of Accounts of Power Grid Corporation of India Ltd.WR-II as on 31-03-2024.

The estimated expenditure is based on Management estimate.

For G.D. Apte & Co.
Chartered Accountants
Firm Registration Number: 100 515W
UDIN: 24121007BKCKUI6799


Anagha M. Nanivadekar
Partner
Membership Number: 121007
Pune, September 13, 2024



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3184

Summary of Tariff

Form No. - 1

Name of the Transmission Licensee:	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOC Date	Jun 29, 2017

(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	1,669.77	1,671.47	1,671.67	1,669.60	1,667.68
Interest on Loan-Form No. 9E	1,491.60	1,313.43	1,176.96	1,064.74	951.48
Return on Equity-Form No. 8	1,775.59	1,777.40	1,777.61	1,775.40	1,773.35
Int. on Working capital-Form No.11	88.13	80.40	73.62	72.55	81.65
Op. and maintenance-Form No.2	318.61	329.73	341.31	353.34	365.66
Total AFC	5,343.70	5,172.43	5,041.17	4,935.63	4,839.82

(Petitioner)



Summary of Asset Level Cost

Form No. - 1A

Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4	
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass	
Region	Western Region	DOC Date Jun 29, 2017

A) Summary of Capital Cost, Means of Finance of the Asset

(Amount in Rs. Lakh)

Particular	i) Apportioned Approved Cost		ii) Summary of Actual / Projected Capital Expenditure incurred							
	As Per IA	As per RCE	As on COD / 01.04.2019	2019-20	2020-21	2021-22	2022-23	2023-24	As on 31.03.2024	
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Building & Civil Works	0.00	0.00	81.38	0.00	0.00	0.00	0.00	0.00	81.38	
Transmission Lines	0.00	0.00	25,859.71	0.00	0.00	0.00	-92.96	0.00	25,766.75	
Substations	0.00	0.00	5,350.29	0.00	0.00	0.00	0.00	0.00	5,350.29	
Comm. Sys. excluding Fiber Optic	0.00	0.00	255.75	0.00	0.00	0.00	0.00	0.00	255.75	
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
IT/Software/UNMS/URTDSM/	0.00	0.00	49.57	0.00	0.00	0.00	0.00	0.00	49.57	
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total Capital Cost as per Books	0.00	0.00	31,596.70	0.00	0.00	0.00	-92.96	0.00	31,503.74	
Less: Liability	0.00	0.00	113.46	0.00	0.00	0.00	0.00	0.00	0.00	
Add: discharge of liability	0.00	0.00	0.00	57.85	6.51	0.92	13.55	6.58	28.05	
De cap During Year As per Books	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total Capital incurred	0.00	0.00	31,483.24	57.85	6.51	0.92	-79.41	6.58	31,475.69	
Equity	11,361.36	0.00	9,444.97	17.35	1.95	0.28	-23.82	1.97	9,442.70	
Debt	26,509.85	0.00	22,038.27	40.50	4.56	0.64	-55.59	4.61	22,032.99	



Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4	
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass	
Region	Western Region	DOCO Date Jun 29, 2017

1. Transmission Lines

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/HVDC	S/C or D/C	No of Sub-Conductors	Voltage Level KV	Line Bays	Line Reactor (Including Switchable Reactor)	Line Length Km	Date of Commercial operation	Covered in the present petition	
									Yes/No	If No, Petition No.
VAPI-KAKRAPAR-NAVSARI TL	AC	DC	4	400 KV	0.000	0.000	151.180	Jun 29, 2017	Y	
VAPI-KAKRAPAR-NAVSARI TL	AC	MC	4	400 KV	0.000	0.000	4.070	Jun 29, 2017	Y	

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 (BUNDLE CONDUCTOR WITH FOUR SUB-CONDUCTORS)					
Normative Rate of O&M as per Regulation	1.322	1.368	1.416	1.466	1.517
No. of Units - (Length in KM)	151.18	151.18	151.18	151.18	151.18

O&M Claimed	199.86	206.81	214.07	221.63	229.34
MULTICIRCUIT WITH FOUR OR MORE CONDUCTORS					
Normative Rate of O&M as per Regulation	2.319	2.401	2.485	2.572	2.662
No. of Units - (Length in KM)	4.07	4.07	4.07	4.07	4.07
O&M Claimed	9.44	9.77	10.11	10.47	10.83

ms



2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transfomers/ Reactor/ SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV		
Vapi:KAKRAPAR BAY 1 AND 2	Conventional	400 KV		2.000								Jun 29, 2017	Y
Navsari:KAKRAPAR BAY 1 AND 2	GIS	400 KV		2.000								Jun 29, 2017	Y

Summary:

O&M Expenses For Substations Covered in the instant petition		2019-20	2020-21	2021-22	2022-23	2023-24
400KV SUB-STATION						
Normative Rate of O&M as per Regulation		32.15	33.28	34.45	35.66	36.91
No. of Units		2.00	2.00	2.00	2.00	2.00
O&M Claimed		64.30	66.56	68.90	71.32	73.82
400 KV GIS SUBSTATION						
Normative Rate of O&M as per Regulation		22.505	23.296	24.115	24.962	25.837
No. of Units		2.00	2.00	2.00	2.00	2.00
O&M Claimed		45.01	46.59	48.23	49.92	51.67



WS

3. Communication System

Summary:



Summary of O&M Expenses claim

(Amount in Rs. Lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M					
Transmission Line	209.30	216.58	224.18	232.10	240.17
Substation	109.31	113.15	117.13	121.24	125.49
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	318.61	329.73	341.31	353.34	365.66
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition)					
*Security Expenses	0.00	0.00	0.00	0.00	0.00
*Actual Capital Spare consumed	0.00	0.00	0.00	0.00	0.00
*Insurance Premium Paid	0.00	0.00	0.00	0.00	0.00
Total O&M	318.61	329.73	341.31	353.34	365.66

W.S.
(Petitioner)



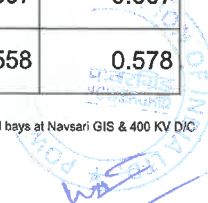
Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOC Date	Jun 29, 2017

(Amount in Rs. Lakh)

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



Single Circuit (Single Conductor)	0.23	0.252	0.26	0.27	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.21	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.806	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.346	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.123	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.413	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations						
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	0.00	834.00	864.00	894.00	925.00	958.00
Gazuwaka HVDC Back-to-Back station (Rs. Lakh per 500 MW)	0.00	1,666.00	1,725.00	1,785.00	1,848.00	1,913.00
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	0.00	2,252.00	2,331.00	2,413.00	2,498.00	2,586.00
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	0.00	2,468.00	2,555.00	2,645.00	2,738.00	2,834.00
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	0.00	1,696.00	1,756.00	1,817.00	1,881.00	1,947.00
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	0.00	2,563.00	2,653.00	2,746.00	2,842.00	2,942.00


(Petitioner)



Statement of Capital cost

Form No. - 4A

Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4	
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass	
Region	Western Region	DOC Date Jun 29, 2017

A) Capital Cost

(Amount in Rs. Lakh)

Particular	Accrual Basis	Un-discharged Liabilities	Cash Basis
As on relevant date :2019-20			
a) Opening Gross Block Amount as per books	31,596.70	113.46	31,483.24
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in A(a) above	2,496.15	0.00	2,496.15
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	491.49	0.00	491.49

a) Addition in Gross Block Amount during the period	0.00	0.00	0.00
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	31,596.70	55.61	31,541.09
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in C(a) above	2,496.15	0.00	2,496.15
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	491.49	0.00	491.49

As on relevant date :2020-21

a) Opening Gross Block Amount as per books	31,596.70	55.61	31,541.09
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in A(a) above	2,496.15	0.00	2,496.15



c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	491.49	0.00	491.49
a) Addition in Gross Block Amount during the period			
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00
a) Closing Gross Block Amount as per books			
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	31,596.70	49.10	31,547.60
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	2,496.15	0.00	2,496.15
	491.49	0.00	491.49
As on relevant date :2021-22			
a) Opening Gross Block Amount as per books			
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	31,596.70	49.10	31,547.60
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	2,496.15	0.00	2,496.15
	491.49	0.00	491.49
a) Addition in Gross Block Amount during the period			
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00
a) Closing Gross Block Amount as per books			
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	31,596.70	48.18	31,548.52
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	2,496.15	0.00	2,496.15
	491.49	0.00	491.49

As on relevant date :2022-23

a) Opening Gross Block Amount as per books			
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	31,596.70	48.18	31,548.52
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	2,496.15	0.00	2,496.15
	491.49	0.00	491.49



Discharge of liability by payment and claimed as ACE	57.85	6.51	0.92	13.55	6.58	28.05	0.00	0.00	0.00
Reversal/cancelation (to be entered)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing Balance of Admitted liability	55.61	49.10	48.18	34.63	28.05	0.00	0.00	0.00	0.00


 (Petitioner)



Financial Package upto COD

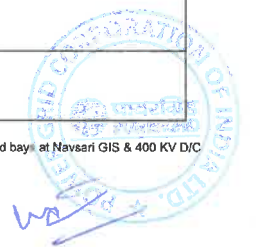
Form No. - 6

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOCOC Date	Jun 29, 2017

(Amount in Rs. Lakh)

Particulars	Financial Package as Approved		Financial Package as on COD 01/04/2019		As Admitted on COD 01/04/2019	
	Currency	Amount	Currency	Amount	Currency	Amount
Loans		0.00		0.00		0.00
Loan-Domestic		0.00		0.00		0.00
Loan-Foreign		0.00		0.00		0.00
Total Loans	INR	22,171.09	INR	22,038.27		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	9,501.89	INR	9,444.98		0.00
Total Equity	INR	9,501.89	INR	9,444.98		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	31,672.98	INR	31,483.25		0.00

Particulars	Debt	Equity	Total
Addcap for 2019 - 2020			57.85
Addcap for 2020 - 2021			6.51
Addcap for 2021 - 2022			0.92
Addcap for 2022 - 2023			-79.41



Addcap for 2023 - 2024			6.58	
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Particulars	Actual	Normative	
Addcap for 2019 - 2020			
Equity		17.35	
Debt		40.50	
Total		57.85	
Addcap for 2020 - 2021			
Equity		1.95	
Debt		4.56	
Total		6.51	
Addcap for 2021 - 2022			
Equity		0.28	
Debt		0.64	
Total		0.92	
Addcap for 2022 - 2023			
Equity		-23.82	
Debt		-55.59	
Total		-79.41	
Addcap for 2023 - 2024			
Equity		1.97	
Debt		4.61	
Total		6.58	
Total Capital cost with Addcap		31,475.70	

WA
(Petitioner)



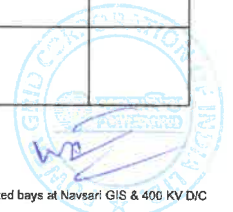
Statement of Additional Capitalisation after COD

Form No. - 7

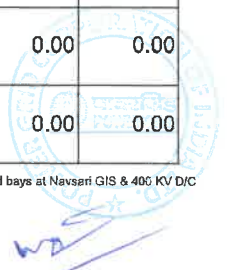
Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOCO Date	Jun 29, 2017

(Amount in Rs. Lakh)

Particulars	Addition into Gross Block as per books of Account during the year (2)	De-Cap into Gross Block as per books of Account during the year	Less: Deductions dr. the year towards				Add: Discharge of earlier admitted liability	ACE on cash basis for tariff purpose	Admitted Cost in final tariff (Rs Lakh)
			Grants Received (if any) (3)	Asset pertaining to other businesses (If any) (4)	Other Deduction (if any) (5)	Less: Undischarged liability included in (2-4-5)			
ACE for the year :2019-20 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	21.23	21.23	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	36.62	36.62	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	57.85	57.85	0.00
ACE for the year :2020-21 (Actual/Projected)									



Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	5.92	5.92	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.59	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	6.51	6.51	0.00
ACE for the year :2021-22 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.72	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.92	0.00
ACE for the year :2022-23 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Transmission Lines	-92.96	0.00	0.00	0.00	0.00	0.00	1.00	-91.96	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	12.55	12.55	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	-92.96	0.00	0.00	0.00	0.00	0.00	13.55	-79.41	0.00
ACE for the year :2023-24 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	1.80	1.80	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	4.78	4.78	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	6.58	6.58	0.00


(Petitioner)



Financing of Additional Capitalisation

Form No. - 7A

Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4	
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass	
Region	Western Region	DOC Date Jun 29, 2017

(Amount in Rs. Lakh)

Financial Year (Starting of COD)	Actual/Projected					Admitted				
	2019-20	2020-21	2021-22	2022-23	2023-24	2019-20	2020-21	2021-22	2022-23	2023-24
Amount capitalized in Work/ equipment										
Financing Details										
Total Loan	40.50	4.56	0.64	-55.59	4.61					
Equity	17.35	1.95	0.28	-23.82	1.97					
Total	57.85	6.51	0.92	-79.41	6.58					




 (Petitioner)

Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4			
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass			
Region	Western Region	DOCO Date	Jun 29, 2017	

(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	9,444.98	9,462.33	9,464.28	9,464.56	9,440.74
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)	9,444.98	9,462.33	9,464.28	9,464.56	9,440.74
Add: Increase in Equity due to addition during the year / period	0.00	0.00	0.00	-27.88	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	17.35	1.95	0.28	4.06	1.97
Closing Normative Equity	9,462.33	9,464.28	9,464.56	9,440.74	9,442.71
Average Normative Equity	9,453.66	9,463.31	9,464.42	9,452.65	9,441.73
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	1,775.59	1,777.40	1,777.61	1,775.40	1,773.35
Pro rata return on Equity	1,775.59	1,777.40	1,777.61	1,775.40	1,773.35

(Petitioner)

Calculation of WAR of interest on actual loan

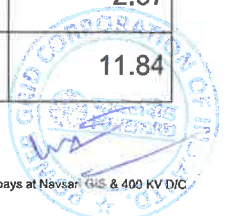
Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4				
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass				
Region	Western Region	DOC Date	Jun 29, 2017		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
SBI (2014-15) -ADD CAP 2017-18					
Gross Loan- Opening	295.39	295.39	295.39	295.39	295.39
Cumulative repayments of Loans upto previous year	0.00	29.54	59.08	88.62	118.16
Net loan-Opening	295.39	265.85	236.31	206.77	177.23
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	29.54	29.54	29.54	29.54	29.54
Net Loan-Closing	265.85	236.31	206.77	177.23	147.69
Average Net Loan	280.62	251.08	221.54	192.00	162.46
Rate of Interest on Loan on Annual Basis	7.993319	6.894349	6.65	7.243625	8.135644
Interest on loan	22.4309	17.3103	14.7324	13.9078	13.2172

SBI (2014-15) -ADDCAP ACCRUAL IDC					
Gross Loan- Opening	23.68	23.68	23.68	23.68	23.68
Cumulative repayments of Loans upto previous year	0.00	2.37	4.74	7.10	9.47
Net loan-Opening	23.68	21.31	18.94	16.58	14.21
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	2.37	2.37	2.37	2.37	2.37
Net Loan-Closing	21.31	18.94	16.57	14.21	11.84



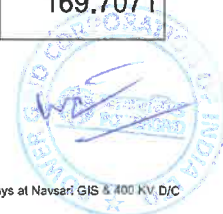
Average Net Loan	22.50	20.13	17.76	15.40	13.03
Rate of Interest on Loan on Annual Basis	7.993319	6.894349	6.65	7.243625	8.135644
Interest on loan	1.7985	1.3878	1.181	1.1155	1.0601

SBI (2014-15) -ADDCAP ACCRUAL IDC

Gross Loan- Opening	883.66	883.66	883.66	883.66	883.66
Cumulative repayments of Loans upto previous year	0.00	88.37	176.73	265.10	353.46
Net loan-Opening	883.66	795.29	706.93	618.56	530.20
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	88.37	88.37	88.37	88.37	88.37
Net Loan-Closing	795.29	706.92	618.56	530.19	441.83
Average Net Loan	839.48	751.11	662.75	574.38	486.02
Rate of Interest on Loan on Annual Basis	7.993319	6.894349	6.65	7.243625	8.135644
Interest on loan	67.1023	51.7841	44.0729	41.6059	39.5409

SBI (2014-15) -LOAN 13

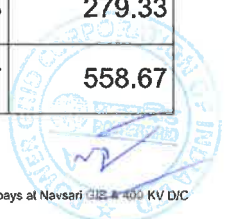
Gross Loan- Opening	3,792.66	3,792.66	3,792.66	3,792.66	3,792.66
Cumulative repayments of Loans upto previous year	0.00	379.27	758.53	1,137.80	1,517.06
Net loan-Opening	3,792.66	3,413.39	3,034.13	2,654.86	2,275.60
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	379.27	379.27	379.27	379.27	379.27
Net Loan-Closing	3,413.39	3,034.12	2,654.86	2,275.59	1,896.33
Average Net Loan	3,603.03	3,223.76	2,844.50	2,465.23	2,085.97
Rate of Interest on Loan on Annual Basis	7.993319	6.894349	6.65	7.243625	8.135644
Interest on loan	288.0017	222.2573	189.1593	178.572	169.7071



BOND XLVI -LOAN 1					
Gross Loan- Opening	1,542.00	1,542.00	1,542.00	1,542.00	1,542.00
Cumulative repayments of Loans upto previous year	0.00	514.00	514.00	514.00	514.00
Net loan-Opening	1,542.00	1,028.00	1,028.00	1,028.00	1,028.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	514.00	0.00	0.00	0.00	0.00
Net Loan-Closing	1,028.00	1,028.00	1,028.00	1,028.00	1,028.00
Average Net Loan	1,285.00	1,028.00	1,028.00	1,028.00	1,028.00
Rate of Interest on Loan on Annual Basis	9.30	9.30	9.30	9.30	9.30
Interest on loan	119.505	95.604	95.604	95.604	95.604

BOND XLVIII -LOAN 2					
Gross Loan- Opening	828.00	828.00	828.00	828.00	828.00
Cumulative repayments of Loans upto previous year	0.00	207.00	207.00	414.00	414.00
Net loan-Opening	828.00	621.00	621.00	414.00	414.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	207.00	0.00	207.00	0.00	0.00
Net Loan-Closing	621.00	621.00	414.00	414.00	414.00
Average Net Loan	724.50	621.00	517.50	414.00	414.00
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	59.409	50.922	42.435	33.948	33.948

BOND XLIX -LOAN 3					
Gross Loan- Opening	838.00	838.00	838.00	838.00	838.00
Cumulative repayments of Loans upto previous year	0.00	279.33	279.33	279.33	279.33
Net loan-Opening	838.00	558.67	558.67	558.67	558.67



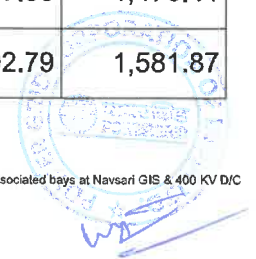
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	279.33	0.00	0.00	0.00	0.00
Net Loan-Closing	558.67	558.67	558.67	558.67	558.67
Average Net Loan	698.34	558.67	558.67	558.67	558.67
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	56.9147	45.5316	45.5316	45.5316	45.5316

BOND- LII -LOAN 6

Gross Loan- Opening	855.11	855.11	855.11	855.11	855.11
Cumulative repayments of Loans upto previous year	0.00	0.00	285.04	285.04	285.04
Net loan-Opening	855.11	855.11	570.07	570.07	570.07
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	285.04	0.00	0.00	0.00
Net Loan-Closing	855.11	570.07	570.07	570.07	570.07
Average Net Loan	855.11	712.59	570.07	570.07	570.07
Rate of Interest on Loan on Annual Basis	8.32	8.32	8.32	8.32	8.32
Interest on loan	71.1452	59.2875	47.4298	47.4298	47.4298

BOND L -LOAN 4

Gross Loan- Opening	2,531.00	2,531.00	2,531.00	2,531.00	2,531.00
Cumulative repayments of Loans upto previous year	0.00	210.92	421.83	632.75	843.67
Net loan-Opening	2,531.00	2,320.08	2,109.17	1,898.25	1,687.33
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	210.92	210.92	210.92	210.92	210.92
Net Loan-Closing	2,320.08	2,109.16	1,898.25	1,687.33	1,476.41
Average Net Loan	2,425.54	2,214.62	2,003.71	1,792.79	1,581.87



Rate of Interest on Loan on Annual Basis	8.40	8.40	8.40	8.40	8.40
Interest on loan	203.7454	186.0281	168.3116	150.5944	132.8771

BOND LI -LOAN 5					
Gross Loan- Opening	2,673.41	2,673.41	2,673.41	2,673.41	2,673.41
Cumulative repayments of Loans upto previous year	0.00	222.78	445.57	668.35	891.14
Net loan-Opening	2,673.41	2,450.63	2,227.84	2,005.06	1,782.27
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	222.78	222.78	222.78	222.78	222.78
Net Loan-Closing	2,450.63	2,227.85	2,005.06	1,782.28	1,559.49
Average Net Loan	2,562.02	2,339.24	2,116.45	1,893.67	1,670.88
Rate of Interest on Loan on Annual Basis	8.40	8.40	8.40	8.40	8.40
Interest on loan	215.2097	196.4962	177.7818	159.0683	140.3539

BOND LIII -LOAN 7					
Gross Loan- Opening	963.79	963.79	963.79	963.79	963.79
Cumulative repayments of Loans upto previous year	0.00	0.00	80.32	160.63	240.95
Net loan-Opening	963.79	963.79	883.47	803.16	722.84
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	80.32	80.32	80.32	80.32
Net Loan-Closing	963.79	883.47	803.15	722.84	642.52
Average Net Loan	963.79	923.63	843.31	763.00	682.68
Rate of Interest on Loan on Annual Basis	8.13	8.13	8.13	8.13	8.13
Interest on loan	78.3561	75.0911	68.5611	62.0319	55.5019

BOND LIV -LOAN 8					
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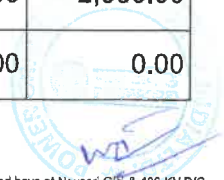
Gross Loan- Opening	2,016.00	2,016.00	2,016.00	2,016.00	2,016.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	672.00	672.00
Net loan-Opening	2,016.00	2,016.00	2,016.00	1,344.00	1,344.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	672.00	0.00	0.00
Net Loan-Closing	2,016.00	2,016.00	1,344.00	1,344.00	1,344.00
Average Net Loan	2,016.00	2,016.00	1,680.00	1,344.00	1,344.00
Rate of Interest on Loan on Annual Basis	7.97	7.97	7.97	7.97	7.97
Interest on loan	160.6752	160.6752	133.896	107.1168	107.1168

BOND LVI -LOAN 10

Gross Loan- Opening	150.98	150.98	150.98	150.98	150.98
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	150.98	150.98	150.98	150.98	150.98
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	150.98	150.98	150.98	150.98	150.98
Average Net Loan	150.98	150.98	150.98	150.98	150.98
Rate of Interest on Loan on Annual Basis	7.36	7.36	7.36	7.36	7.36
Interest on loan	11.1121	11.1121	11.1121	11.1121	11.1121

BOND LV -LOAN 9

Gross Loan- Opening	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00



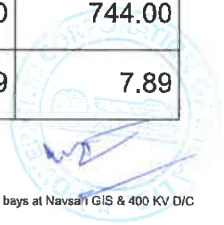
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
Average Net Loan	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
Rate of Interest on Loan on Annual Basis	7.55	7.55	7.55	7.55	7.55
Interest on loan	151.00	151.00	151.00	151.00	151.00

BOND LVII (57) -LOAN 11

Gross Loan- Opening	700.00	700.00	700.00	700.00	700.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	700.00	700.00
Net loan-Opening	700.00	700.00	700.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	700.00	0.00	0.00
Net Loan-Closing	700.00	700.00	0.00	0.00	0.00
Average Net Loan	700.00	700.00	350.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	50.40	50.40	25.20	0.00	0.00

BOND 58 -LOAN 12

Gross Loan- Opening	744.00	744.00	744.00	744.00	744.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	744.00	744.00	744.00	744.00	744.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	744.00	744.00	744.00	744.00	744.00
Average Net Loan	744.00	744.00	744.00	744.00	744.00
Rate of Interest on Loan on Annual Basis	7.89	7.89	7.89	7.89	7.89



Interest on loan	58.7016	58.7016	58.7016	58.7016	58.7016
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BOND 59 -LOAN 14					
Gross Loan- Opening	693.95	693.95	693.95	693.95	693.95
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	693.95	693.95	693.95	693.95	693.95
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	693.95	693.95	693.95	693.95	693.95
Average Net Loan	693.95	693.95	693.95	693.95	693.95
Rate of Interest on Loan on Annual Basis	7.30	7.30	7.30	7.30	7.30
Interest on loan	50.6584	50.6584	50.6584	50.6584	50.6584

BOND 59 -LOAN 18					
Gross Loan- Opening	326.05	326.05	326.05	326.05	326.05
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	326.05	326.05	326.05	326.05	326.05
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	326.05	326.05	326.05	326.05	326.05
Average Net Loan	326.05	326.05	326.05	326.05	326.05
Rate of Interest on Loan on Annual Basis	7.30	7.30	7.30	7.30	7.30
Interest on loan	23.8017	23.8017	23.8017	23.8017	23.8017

BOND60 (LX) -LOAN 15					
Gross Loan- Opening	160.37	160.37	160.37	160.37	160.37



Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	160.37	160.37	160.37	160.37	160.37
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	160.37	160.37	160.37	160.37	160.37
Average Net Loan	160.37	160.37	160.37	160.37	160.37
Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	11.5466	11.5466	11.5466	11.5466	11.5466

SBI-04 -ADD CAP 2019-20					
Gross Loan- Opening	0.00	14.37	14.37	14.37	14.37
Cumulative repayments of Loans upto previous year	0.00	0.00	1.29	1.36	1.36
Net loan-Opening	0.00	14.37	13.08	13.01	13.01
Add: Drawl(s) during the year	14.37	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	1.29	0.06	0.00	1.44
Net Loan-Closing	14.37	13.08	13.02	13.01	11.57
Average Net Loan	7.19	13.73	13.05	13.01	12.29
Rate of Interest on Loan on Annual Basis	8.027596	6.902593	6.65	7.225616	8.126549
Interest on loan	0.5772	0.9477	0.8678	0.9401	0.9988

SBI-04 -ADD CAP 2020-21					
Gross Loan- Opening	0.00	0.00	4.56	4.56	4.56
Cumulative repayments of Loans upto previous year	0.00	0.00	0.41	0.43	0.43
Net loan-Opening	0.00	0.00	4.15	4.13	4.13
Add: Drawl(s) during the year	0.00	4.56	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.41	0.02	0.00	0.46



Net Loan-Closing	0.00	4.15	4.13	4.13	3.67
Average Net Loan	0.00	2.08	4.14	4.13	3.90
Rate of Interest on Loan on Annual Basis	8.027596	6.902593	6.65	7.225616	8.126549
Interest on loan	0.00	0.1436	0.2753	0.2984	0.3169

SBI-04 -ADD CAP 2023-24

Gross Loan- Opening	0.00	0.00	0.00	0.00	0.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.44
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	4.61
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.46
Net Loan-Closing	0.00	0.00	0.00	0.00	4.15
Average Net Loan	0.00	0.00	0.00	0.00	2.08
Rate of Interest on Loan on Annual Basis	8.027596	6.902593	6.65	7.225616	8.126549
Interest on loan	0.00	0.00	0.00	0.00	0.169

SBI-04 -LOAN 16

Gross Loan- Opening	67.84	67.84	67.84	67.84	67.84
Cumulative repayments of Loans upto previous year	0.00	0.00	6.11	6.40	6.40
Net loan-Opening	67.84	67.84	61.73	61.44	61.44
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	6.11	0.30	0.00	6.78
Net Loan-Closing	67.84	61.73	61.43	61.44	54.66
Average Net Loan	67.84	64.79	61.58	61.44	58.05
Rate of Interest on Loan on Annual Basis	8.027596	6.902593	6.65	7.225616	8.126549
Interest on loan	5.4459	4.4722	4.0951	4.4394	4.7175



ICICI (3270 CR.) (Replaced with Bond LXII) - LOAN 17

Gross Loan- Opening	0.76	0.76	0.76	0.76	0.76
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.76	0.76	0.76	0.76	0.76
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.76	0.76	0.76	0.76	0.76
Average Net Loan	0.76	0.76	0.76	0.76	0.76
Rate of Interest on Loan on Annual Basis	8.36	8.36	8.36	8.36	8.36
Interest on loan	0.0635	0.0635	0.0635	0.0635	0.0635

Bond - LXIV -ADD CAP 2019-20

Gross Loan- Opening	0.00	26.12	26.12	26.12	26.12
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	26.12	26.12	26.12	26.12
Add: Drawl(s) during the year	26.12	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	26.12	26.12	26.12	26.12	26.12
Average Net Loan	13.06	26.12	26.12	26.12	26.12
Rate of Interest on Loan on Annual Basis	7.49	7.49	7.49	7.49	7.49
Interest on loan	0.9782	1.9564	1.9564	1.9564	1.9564

HDFC (Rs.5000 Cr.) -ADD CAP 2021-22

Gross Loan- Opening	0.00	0.00	0.00	0.64	0.64
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.32	0.32



Net loan-Opening	0.00	0.00	0.00	0.32	0.32
Add: Drawl(s) during the year	0.00	0.00	0.64	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.32	0.00	0.00
Net Loan-Closing	0.00	0.00	0.32	0.32	0.32
Average Net Loan	0.00	0.00	0.16	0.32	0.32
Rate of Interest on Loan on Annual Basis	5.95	5.95	5.95	7.315205	8.10
Interest on loan	0.00	0.00	0.0095	0.0234	0.0259

Summary

Gross Loan- Opening	22,086.65	22,127.14	22,131.70	22,132.34	22,132.34
Cumulative repayments of Loans upto previous year	0.00	1,933.58	3,239.98	5,833.23	6,847.23
Net loan-Opening	22,086.65	20,193.56	18,891.72	16,299.11	15,285.55
Add: Drawl(s) during the year	40.49	4.56	0.64	0.00	4.61
Less: Repayment(s) of loan during the year	1,933.58	1,306.42	2,593.27	1,013.57	1,022.71
Net Loan-Closing	20,193.56	18,891.70	16,299.09	15,285.54	14,267.45
Average Net Loan	21,140.13	19,542.66	17,595.42	15,792.34	14,776.52
Rate of Interest on Loan on Annual Basis	8.0822	7.8146	7.7747	7.922	8.1004
Interest on loan	1,708.5789	1,527.179	1,367.9845	1,251.0676	1,196.9568

(Petitioner)



Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4				
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass				
Region	Western Region	DOC Date	Jun 29, 2017		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the Year	366.00	365.00	365.00	365.00	366.00
No. of days for which Tariff claimed	366.00	365.00	365.00	365.00	366.00
Gross normative loan-Opening	22,038.27	22,078.77	22,083.33	22,083.97	22,028.38
Cumulative repayments of Normative loan upto previous year	2,768.22	4,437.99	6,109.46	7,781.13	9,450.73
Net normative loan-Opening	19,270.05	17,640.78	15,973.87	14,302.84	12,577.65
Addition in normative loan towards the ACE	40.50	4.56	0.64	-55.59	4.61
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	1,669.77	1,671.47	1,671.67	1,669.60	1,667.68
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	17,640.78	15,973.87	14,302.84	12,577.65	10,914.58
Average normative loan	18,455.42	16,807.33	15,138.36	13,440.25	11,746.12
Weighted Average Rate of interest on actual loan	8.0822	7.8146	7.7747	7.922	8.1004
Interest on normative loan	1,491.60	1,313.43	1,176.96	1,064.74	951.48
Pro rata interest on normative loan	1,491.60	1,313.43	1,176.96	1,064.74	951.48

(Petitioner)



Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOCO Date	Jun 29, 2017

(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	81.38	0.00	81.38	81.38	3.34	2.72
Transmission Line	25,800.99	21.23	25,822.22	25,811.61	5.28	1,362.85
Sub Station	5,295.55	36.62	5,332.17	5,313.86	5.28	280.57
Comm. Sys. excluding Fiber Optic	255.75	0.00	255.75	255.75	6.33	16.19
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	49.57	0.00	49.57	49.57	15.00	7.44
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	31,483.24	57.85	31,541.09	31,512.17	0.00	1,669.77
Weighted Average Rate of Depreciation(%)					5.29881	

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



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Civil & Building	81.38	0.00	81.38	81.38	3.34	2.72
Transmission Line	25,822.22	5.92	25,828.14	25,825.18	5.28	1,363.57
Sub Station	5,332.17	0.59	5,332.76	5,332.47	5.28	281.55
Comm. Sys. excluding Fiber Optic	255.75	0.00	255.75	255.75	6.33	16.19
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	49.57	0.00	49.57	49.57	15.00	7.44
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	31,541.09	6.51	31,547.60	31,544.35	0.00	1,671.47
Weighted Average Rate of Depreciation(%)					5.298794	

2021-22						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	81.38	0.00	81.38	81.38	3.34	2.72
Transmission Line	25,828.14	0.72	25,828.86	25,828.50	5.28	1,363.74
Sub Station	5,332.76	0.20	5,332.96	5,332.86	5.28	281.58
Comm. Sys. excluding Fiber Optic	255.75	0.00	255.75	255.75	6.33	16.19
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	49.57	0.00	49.57	49.57	15.00	7.44
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	31,547.60	0.92	31,548.52	31,548.06	0.00	1,671.67
Weighted Average Rate of Depreciation(%)					5.298804	



2022-23						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	81.38	0.00	81.38	81.38	3.34	2.72
Transmission Line	25,828.86	-91.96	25,736.90	25,782.88	5.28	1,361.34
Sub Station	5,332.96	12.55	5,345.51	5,339.24	5.28	281.91
Comm. Sys. excluding Fiber Optic	255.75	0.00	255.75	255.75	6.33	16.19
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	49.57	0.00	49.57	49.57	15.00	7.44
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	31,548.52	-79.41	31,469.11	31,508.82	0.00	1,669.60
Weighted Average Rate of Depreciation(%)					5.298834	

2023-24						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	81.38	0.00	81.38	81.38	3.34	2.72
Transmission Line	25,736.90	1.80	25,738.70	25,737.80	5.28	1,358.96
Sub Station	5,345.51	4.78	5,350.29	5,347.90	5.28	282.37
Comm. Sys. excluding Fiber Optic	255.75	0.00	255.75	255.75	6.33	16.19
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	49.57	0.00	49.57	49.57	15.00	7.44
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	31,469.11	6.58	31,475.69	31,472.40	0.00	1,667.68



Weighted Average Rate of Depreciation(%)					5.298865	
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(Petitioner)



Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOCO Date	Jun 29, 2017

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	366.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/Project	33.00	33.00	33.00	33.00	33.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	1.00	2.00	3.00	4.00	5.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	32.00	31.00	30.00	29.00	28.00
Capital Base					
1.4 Opening capital cost	31,483.24	31,541.09	31,547.60	31,548.52	31,469.11
1.5 Additional Capital Expenditure dr. the year	57.85	6.51	0.92	-79.41	6.58
1.6 De-Capitalisation During the year	0.00	0.00	0.00	0.00	0.00
1.7 Closing capital cost	31,541.09	31,547.60	31,548.52	31,469.11	31,475.69
1.8 Average capital cost	31,512.17	31,544.35	31,548.06	31,508.82	31,472.40
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	49.57	49.57	49.57	49.57	49.57
1.11 Asset having 10% salvage value included in 1.8	31,462.60	31,494.78	31,498.49	31,459.25	31,422.83
1.12 Depreciable Value(1.10+90% of 1.11)	28,365.91	28,394.87	28,398.21	28,362.90	28,330.12
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	5.29881	5.298794	5.298804	5.298834	5.298865



1.14 Depreciation(for the period)	1,669.77	1,671.47	1,671.67	1,669.60	1,667.68
1.15 Depreciation(Annualised)	1,669.77	1,671.47	1,671.67	1,669.60	1,667.68
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	2,768.23	4,438.00	6,109.47	7,781.14	9,450.74
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	4,438.00	6,109.47	7,781.14	9,450.74	11,118.42

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(Petitioner)



Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOCO Date	Jun 29, 2017

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	366.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
O&M Expenses-one month	26.55	27.48	28.44	29.45	30.47
Maintenance spares 15% of O&M Expenses	47.79	49.46	51.20	53.00	54.85
Receivables equivalent to 45 days of AFC	657.01	637.70	621.51	608.50	595.06
Total Working capital	731.35	714.64	701.15	690.95	680.38
Bank Rate as on 01.04.2019 or as on 01st April of the COD year, whichever is later.	12.05	11.25	10.50	10.50	12.00
Interest on working capital	88.13	80.40	73.62	72.55	81.65
Pro rata interest on working capital	88.13	80.40	73.62	72.55	81.65

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(Petitioner)



Summary of Tariff

Form No. - 1

Name of the Transmission Licensee:	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOC Date	Jun 29, 2017

(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	1,690.76	1,684.58	1,684.06	1,653.01	1,645.70
Interest on Loan-Form No. 9E	813.98	674.29	537.83	405.99	274.57
Return on Equity-Form No. 8	1,774.32	1,775.11	1,775.11	1,775.11	1,775.11
Int. on Working capital-Form No.11	76.84	75.37	74.05	72.23	71.14
Op. and maintenance-Form No.2	304.79	320.83	337.62	355.49	374.12
Total AFC	4,660.69	4,530.18	4,408.67	4,261.83	4,140.64


(Petitioner)


Summary of Asset Level Cost

Form No. - 1A

Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4	
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass	
Region	Western Region	DOCO Date Jun 29, 2017

A) Summary of Capital Cost, Means of Finance of the Asset

(Amount in Rs. Lakh)

Particular	i) Apporioned Approved Cost		ii) Summary of Actual / Projected Capital Expenditure incurred						
	As per IA	As per RCE	As on COD / 01.04.2024	2024-25	2025-26	2026-27	2027-28	2028-29	As on 31.03.2029
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	81.38	0.00	0.00	0.00	0.00	0.00	81.38
Transmission Lines	0.00	0.00	25,766.75	0.00	0.00	0.00	0.00	0.00	25,766.75
Substations	0.00	0.00	5,350.29	0.00	0.00	0.00	0.00	0.00	5,350.29
Comm. Sys. excluding Fiber Optic	0.00	0.00	255.75	0.00	0.00	0.00	0.00	0.00	255.75
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDMS/	0.00	0.00	49.57	0.00	0.00	0.00	0.00	0.00	49.57
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Capital Cost as per Books	0.00	0.00	31,503.74	0.00	0.00	0.00	0.00	0.00	31,503.74
Less: Liability	0.00	0.00	28.05	0.00	0.00	0.00	0.00	0.00	0.00
Add: discharge of liability	0.00	0.00	0.00	28.05	0.00	0.00	0.00	0.00	0.00
De cap During Year As per Books	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Capital incurred	0.00	0.00	31,475.69	28.05	0.00	0.00	0.00	0.00	31,503.74
Equity	11,361.36	0.00	9,442.70	8.41	0.00	0.00	0.00	0.00	9,451.11
Debt	26,509.85	0.00	22,032.99	19.64	0.00	0.00	0.00	0.00	22,052.63



Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4	
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass	
Region	Western Region	DOC Date Jun 29, 2017

1. Transmission Lines

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/HVDC	S/C or D/C	No of Sub-Conductors	Voltage Level KV	Line Bays	Line Reactor (Including Switchable Reactor)	Line Length Km	Date of Commercial operation	Covered in the present petition	
									Yes/No	If No, Petition No.
VAPI-KAKRAPAR-NAVSARI TL	AC	DC	4	400 KV	0.000	0.000	151.180	Jun 29, 2017	Y	
VAPI-KAKRAPAR-NAVSARI TL	AC	MC	4	400 KV	0.000	0.000	4.070	Jun 29, 2017	Y	

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 (BUNDLE CONDUCTOR WITH FOUR SUB-CONDUCTORS)					
Normative Rate of O&M as per Regulation	1.291	1.359	1.43	1.506	1.585
No. of Units - (Length in KM)	151.18	151.18	151.18	151.18	151.18



O&M Claimed	195.17	205.45	216.19	227.68	239.62
MULTICIRCUIT WITH FOUR OR MORE CONDUCTORS					
Normative Rate of O&M as per Regulation	2.266	2.385	2.51	2.642	2.781
No. of Units - (Length in KM)	4.07	4.07	4.07	4.07	4.07
O&M Claimed	9.22	9.71	10.22	10.75	11.32

WPS



2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transformers/ Reactor/ SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV		
Vapi:KAKRAPAR BAY 1 AND 2	Conventional	400 KV		2.000								Jun 29, 2017	Y
Navsari:KAKRAPAR BAY 1 AND 2	GIS	400 KV		2.000								Jun 29, 2017	Y

Summary:

O&M Expenses For Substations Covered in the instant petition		2024-25	2025-26	2026-27	2027-28	2028-29
400KV SUB-STATION						
Normative Rate of O&M as per Regulation		29.53	31.08	32.71	34.43	36.23
No. of Units		2.00	2.00	2.00	2.00	2.00
O&M Claimed		59.06	62.16	65.42	68.86	72.46
400 KV GIS SUBSTATION						
Normative Rate of O&M as per Regulation		20.671	21.756	22.897	24.101	25.361
No. of Units		2.00	2.00	2.00	2.00	2.00
O&M Claimed		41.34	43.51	45.79	48.20	50.72



3. Communication System

Summary:

125



Summary of O&M Expenses claim

(Amount in Rs. Lakh)

Particular	2024-25	2025-26	2026-27	2027-28	2028-29
A) Normative O&M					
Transmission Line	204.39	215.16	226.41	238.43	250.94
Substation	100.40	105.67	111.21	117.06	123.18
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	304.79	320.83	337.62	355.49	374.12
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition)					
*Security Expenses	0.00	0.00	0.00	0.00	0.00
*Actual Capital Spare consumed	0.00	0.00	0.00	0.00	0.00
Insurance Premium Paid	0.00	0.00	0.00	0.00	0.00
Total O&M	304.79	320.83	337.62	355.49	374.12

WD

(Petitioner)



Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOCO Date	Jun 29, 2017

(Amount in Rs. Lakh)

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



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


 (Petitioner)



Statement of Capital cost

Form No. - 4A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOCO Date	Jun 29, 2017

(Amount in Rs. Lakh)

A) Capital Cost

Particular	Accrual Basis	Un-discharged Liabilities	Cash Basis
As on relevant date :2024-25			
a) Opening Gross Block Amount as per books	31,503.74	28.05	31,475.69
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in A(a) above	2,496.15	0.00	2,496.15
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	491.49	0.00	491.49
As on relevant date :2025-26			
a) Addition in Gross Block Amount during the period	0.00	0.00	0.00
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00
a) Closing Gross Block Amount as per books	31,503.74	0.00	31,503.74
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in C(a) above	2,496.15	0.00	2,496.15
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	491.49	0.00	491.49
As on relevant date :2025-26			
a) Opening Gross Block Amount as per books	31,503.74	0.00	31,503.74
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in A(a) above	2,496.15	0.00	2,496.15

c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	491.49	0.00	491.49
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a) Addition in Gross Block Amount during the period	0.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books.	31,503.74	0.00	31,503.74
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	2,496.15	0.00	2,496.15
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	491.49	0.00	491.49

As on relevant date :2026-27

a) Opening Gross Block Amount as per books	31,503.74	0.00	31,503.74
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	2,496.15	0.00	2,496.15
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	491.49	0.00	491.49

a) Addition in Gross Block Amount during the period	0.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	31,503.74	0.00	31,503.74
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	2,496.15	0.00	2,496.15
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	491.49	0.00	491.49

As on relevant date :2027-28

a) Opening Gross Block Amount as per books	31,503.74	0.00	31,503.74
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	2,496.15	0.00	2,496.15
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	491.49	0.00	491.49



a) Addition in Gross Block Amount during the period	0.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	31,503.74	0.00	31,503.74
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	2,496.15	0.00	2,496.15
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	491.49	0.00	491.49

As on relevant date :2028-29

a) Opening Gross Block Amount as per books	31,503.74	0.00	31,503.74
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	2,496.15	0.00	2,496.15
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	491.49	0.00	491.49

a) Addition in Gross Block Amount during the period	0.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	31,503.74	0.00	31,503.74
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	2,496.15	0.00	2,496.15
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	491.49	0.00	491.49

B) Flow of liability for the Asset (Amount in Rs. Lakh)

Particular	2024-2025					
Opening balance of liability	28.05	0.00	0.00	0.00	0.00	0.00
Add: Liability from ACE	0.00	0.00	0.00	0.00	0.00	0.00



Discharge of liability by payment and claimed as ACE	28.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversal/cancelation (to be entered)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing Balance of Admitted liability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00


 (Petitioner)



Financial Package upto COD

Form No. - 6

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOC Date	Jun 29, 2017

(Amount in Rs. Lakh)

Particulars	Financial Package as Approved		Financial Package as on COD 01/04/2024		As Admitted on COD 01/04/2024	
	Currency	Amount	Currency	Amount	Currency	Amount
Loans		0.00		0.00		0.00
Loan-Domestic		0.00		0.00		0.00
Loan-Foreign		0.00		0.00		0.00
Total Loans	INR	22,171.09	INR	22,032.99		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	9,501.89	INR	9,442.71		0.00
Total Equity	INR	9,501.89	INR	9,442.71		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	31,672.98	INR	31,475.70		0.00

Particulars	Debt	Equity	Total
Addcap for 2024 - 2025			28.05
Addcap for 2025 - 2026			0.00
Addcap for 2026 - 2027			0.00
Addcap for 2027 - 2028			0.00



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Addcap for 2028 - 2029			0.00	
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Particulars	Actual	Normative		
Addcap for 2024 - 2025				
Equity		8.41		
Debt		19.64		
Total		28.05		
Addcap for 2025 - 2026				
Equity		0.00		
Debt		0.00		
Total		0.00		
Addcap for 2026 - 2027				
Equity		0.00		
Debt		0.00		
Total		0.00		
Addcap for 2027 - 2028				
Equity		0.00		
Debt		0.00		
Total		0.00		
Addcap for 2028 - 2029				
Equity		0.00		
Debt		0.00		
Total		0.00		
Total Capital cost with Addcap		31,503.75		

W.D.

(Petitioner)



Statement of Additional Capitalisation after COD

Form No. - 7

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOC Date	Jun 29, 2017

(Amount in Rs. Lakh)

Particulars	Addition into Gross Block as per books of Account during the year (2)	De-Cap into Gross Block as per books of Account during the year	Less: Deductions dr. the year towards				Add: Discharge of earlier admitted liability	ACE on cash basis for tariff purpose	Admitted Cost in final tariff (Rs Lakh)
			Grants Received (if any) (3)	Asset pertaining to other businesses (If any) (4)	Other Deduction (if any) (5)	Less: Undischarged liability included in (2-4-5)			
ACE for the year :2024-25 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	28.05	28.05	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	28.05	28.05	0.00
ACE for the year :2025-26 (Actual/Projected)									



Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2026-27 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2027-28 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2028-29 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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(Petitioner)



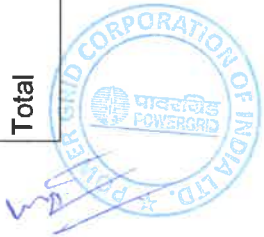
Financing of Additional Capitalisation

Form No. - 7A

Name of the Transmission Licensee	Power Grid Corporation of India Limited
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass
Region	Western Region
	DOC Date
	Jun 29, 2017

(Amount in Rs. Lakh)

	Actual/Projected						Admitted						
	2024-25	2025-26	2026-27	2027-28	2028-29	2024-25	2025-26	2026-27	2027-28	2028-29			
Financial Year (Starting of COD)													
Amount capitalized in Work/ equipment													
Financing Details													
Total Loan	19.64	0.00	0.00	0.00	0.00	0.00							
Equity	8.41	0.00	0.00	0.00	0.00	0.00							
Total	28.05	0.00	0.00	0.00	0.00	0.00							



(Petitioner)

Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4			
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass			
Region	Western Region	DOCO Date	Jun 29, 2017	

(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	9,442.71	9,451.12	9,451.12	9,451.12	9,451.12
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)	9,442.71	9,451.12	9,451.12	9,451.12	9,451.12
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	8.41	0.00	0.00	0.00	0.00
Closing Normative Equity	9,451.12	9,451.12	9,451.12	9,451.12	9,451.12
Average Normative Equity	9,446.92	9,451.12	9,451.12	9,451.12	9,451.12
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	1,774.32	1,775.11	1,775.11	1,775.11	1,775.11
Pro rata return on Equity	1,774.32	1,775.11	1,775.11	1,775.11	1,775.11

(Petitioner)



Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4				
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass				
Region	Western Region	DOCO Date	Jun 29, 2017		

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
SBI (2014-15) -ADD CAP 2017-18					
Gross Loan- Opening	295.39	295.39	295.39	295.39	295.39
Cumulative repayments of Loans upto previous year	147.70	177.23	206.77	236.31	265.85
Net loan-Opening	147.69	118.16	88.62	59.08	29.54
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	29.54	29.54	29.54	29.54	29.54
Net Loan-Closing	118.15	88.62	59.08	29.54	0.00
Average Net Loan	132.92	103.39	73.85	44.31	14.77
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	10.8994	8.478	6.0557	3.6334	1.2111

SBI (2014-15) -ADDCAP ACCRUAL IDC					
Gross Loan- Opening	23.68	23.68	23.68	23.68	23.68
Cumulative repayments of Loans upto previous year	11.84	14.21	16.58	18.94	21.31
Net loan-Opening	11.84	9.47	7.10	4.74	2.37
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	2.37	2.37	2.37	2.37	2.37
Net Loan-Closing	9.47	7.10	4.73	2.37	0.00



Average Net Loan	10.66	8.29	5.92	3.56	1.19
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.8741	0.6798	0.4854	0.2919	0.0976

SBI (2014-15) -ADDCAP ACCRUAL IDC					
Gross Loan- Opening	883.66	883.66	883.66	883.66	883.66
Cumulative repayments of Loans upto previous year	441.83	530.20	618.56	706.93	795.29
Net loan-Opening	441.83	353.46	265.10	176.73	88.37
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	88.37	88.37	88.37	88.37	88.37
Net Loan-Closing	353.46	265.09	176.73	88.36	0.00
Average Net Loan	397.65	309.28	220.92	132.55	44.19
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	32.6073	25.361	18.1154	10.8691	3.6236

SBI (2014-15) -LOAN 13					
Gross Loan- Opening	3,792.66	3,792.66	3,792.66	3,792.66	3,792.66
Cumulative repayments of Loans upto previous year	1,896.33	2,275.60	2,654.86	3,034.13	3,413.39
Net loan-Opening	1,896.33	1,517.06	1,137.80	758.53	379.27
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	379.27	379.27	379.27	379.27	379.27
Net Loan-Closing	1,517.06	1,137.79	758.53	379.26	0.00
Average Net Loan	1,706.70	1,327.43	948.17	568.90	189.64
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	139.9494	108.8493	77.7499	46.6498	15.5505



BOND XLVI -LOAN 1					
Gross Loan- Opening	1,542.00	1,542.00	1,542.00	1,542.00	1,542.00
Cumulative repayments of Loans upto previous year	514.00	1,028.00	1,028.00	1,028.00	1,028.00
Net loan-Opening	1,028.00	514.00	514.00	514.00	514.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	514.00	0.00	0.00	0.00	0.00
Net Loan-Closing	514.00	514.00	514.00	514.00	514.00
Average Net Loan	771.00	514.00	514.00	514.00	514.00
Rate of Interest on Loan on Annual Basis	9.30	9.30	9.30	9.30	9.30
Interest on loan	71.703	47.802	47.802	47.802	47.802

BOND XLVIII -LOAN 2					
Gross Loan- Opening	828.00	828.00	828.00	828.00	828.00
Cumulative repayments of Loans upto previous year	414.00	621.00	621.00	621.00	621.00
Net loan-Opening	414.00	207.00	207.00	207.00	207.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	207.00	0.00	0.00	0.00	0.00
Net Loan-Closing	207.00	207.00	207.00	207.00	207.00
Average Net Loan	310.50	207.00	207.00	207.00	207.00
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	25.461	16.974	16.974	16.974	16.974

BOND XLIX -LOAN 3					
Gross Loan- Opening	838.00	838.00	838.00	838.00	838.00
Cumulative repayments of Loans upto previous year	279.33	558.67	558.67	558.67	558.67
Net loan-Opening	558.67	279.33	279.33	279.33	279.33



Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	279.33	0.00	0.00	0.00	0.00
Net Loan-Closing	279.34	279.33	279.33	279.33	279.33
Average Net Loan	419.01	279.33	279.33	279.33	279.33
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	34.1493	22.7654	22.7654	22.7654	22.7654

BOND- LII -LOAN 6

Gross Loan- Opening	855.11	855.11	855.11	855.11	855.11
Cumulative repayments of Loans upto previous year	285.04	285.04	570.07	570.07	570.07
Net loan-Opening	570.07	570.07	285.04	285.04	285.04
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	285.04	0.00	0.00	0.00
Net Loan-Closing	570.07	285.03	285.04	285.04	285.04
Average Net Loan	570.07	427.55	285.04	285.04	285.04
Rate of Interest on Loan on Annual Basis	8.32	8.32	8.32	8.32	8.32
Interest on loan	47.4298	35.5722	23.7153	23.7153	23.7153

BOND L -LOAN 4

Gross Loan- Opening	2,531.00	2,531.00	2,531.00	2,531.00	2,531.00
Cumulative repayments of Loans upto previous year	1,054.58	1,265.50	1,476.42	1,687.33	1,898.25
Net loan-Opening	1,476.42	1,265.50	1,054.58	843.67	632.75
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	210.92	210.92	210.92	210.92	210.92
Net Loan-Closing	1,265.50	1,054.58	843.66	632.75	421.83
Average Net Loan	1,370.96	1,160.04	949.12	738.21	527.29



Rate of Interest on Loan on Annual Basis	8.40	8.40	8.40	8.40	8.40
Interest on loan	115.1606	97.4434	79.7261	62.0096	44.2924

BOND LI -LOAN 5					
Gross Loan- Opening	2,673.41	2,673.41	2,673.41	2,673.41	2,673.41
Cumulative repayments of Loans upto previous year	1,113.92	1,336.71	1,559.49	1,782.27	2,005.06
Net loan-Opening	1,559.49	1,336.70	1,113.92	891.14	668.35
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	222.78	222.78	222.78	222.78	222.78
Net Loan-Closing	1,336.71	1,113.92	891.14	668.36	445.57
Average Net Loan	1,448.10	1,225.31	1,002.53	779.75	556.96
Rate of Interest on Loan on Annual Basis	8.40	8.40	8.40	8.40	8.40
Interest on loan	121.6404	102.926	84.2125	65.499	46.7846

BOND LIII -LOAN 7					
Gross Loan- Opening	963.79	963.79	963.79	963.79	963.79
Cumulative repayments of Loans upto previous year	321.26	401.58	481.90	562.21	642.53
Net loan-Opening	642.53	562.21	481.89	401.58	321.26
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	80.32	80.32	80.32	80.32	80.32
Net Loan-Closing	562.21	481.89	401.57	321.26	240.94
Average Net Loan	602.37	522.05	441.73	361.42	281.10
Rate of Interest on Loan on Annual Basis	8.13	8.13	8.13	8.13	8.13
Interest on loan	48.9727	42.4427	35.9126	29.3834	22.8534

BOND LIV -LOAN 8					
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Gross Loan- Opening	2,016.00	2,016.00	2,016.00	2,016.00	2,016.00
Cumulative repayments of Loans upto previous year	672.00	672.00	672.00	1,344.00	1,344.00
Net loan-Opening	1,344.00	1,344.00	1,344.00	672.00	672.00
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	672.00	0.00	0.00
Net Loan-Closing	1,344.00	1,344.00	672.00	672.00	672.00
Average Net Loan	1,344.00	1,344.00	1,008.00	672.00	672.00
Rate of Interest on Loan on Annual Basis	7.97	7.97	7.97	7.97	7.97
Interest on loan	107.1168	107.1168	80.3376	53.5584	53.5584

BOND LVI -LOAN 10

Gross Loan- Opening	150.98	150.98	150.98	150.98	150.98
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	150.98	150.98
Net loan-Opening	150.98	150.98	150.98	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	150.98	0.00	0.00
Net Loan-Closing	150.98	150.98	0.00	0.00	0.00
Average Net Loan	150.98	150.98	75.49	0.00	0.00
Rate of Interest on Loan on Annual Basis	7.36	7.36	7.36	7.36	7.36
Interest on loan	11.1121	11.1121	5.5561	0.00	0.00

BOND LV -LOAN 9

Gross Loan- Opening	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00



Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
Average Net Loan	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
Rate of Interest on Loan on Annual Basis	7.55	7.55	7.55	7.55	7.55
Interest on loan	151.00	151.00	151.00	151.00	151.00

BOND LVII (57) -LOAN 11					
Gross Loan- Opening	700.00	700.00	700.00	700.00	700.00
Cumulative repayments of Loans upto previous year	700.00	700.00	700.00	700.00	700.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND 58 -LOAN 12					
Gross Loan- Opening	744.00	744.00	744.00	744.00	744.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	744.00	744.00
Net loan-Opening	744.00	744.00	744.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	744.00	0.00	0.00
Net Loan-Closing	744.00	744.00	0.00	0.00	0.00
Average Net Loan	744.00	744.00	372.00	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	58.7016	58.7016	29.3508	0.00	0.00
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BOND 59 -LOAN 14

Gross Loan- Opening	693.95	693.95	693.95	693.95	693.95
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	693.95
Net loan-Opening	693.95	693.95	693.95	693.95	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	693.95	0.00
Net Loan-Closing	693.95	693.95	693.95	0.00	0.00
Average Net Loan	693.95	693.95	693.95	346.98	0.00
Rate of Interest on Loan on Annual Basis	7.30	7.30	7.30	7.30	7.30
Interest on loan	50.6584	50.6584	50.6584	25.3295	0.00

BOND 59 -LOAN 18

Gross Loan- Opening	326.05	326.05	326.05	326.05	326.05
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	326.05
Net loan-Opening	326.05	326.05	326.05	326.05	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	326.05	0.00
Net Loan-Closing	326.05	326.05	326.05	0.00	0.00
Average Net Loan	326.05	326.05	326.05	163.03	0.00
Rate of Interest on Loan on Annual Basis	7.30	7.30	7.30	7.30	7.30
Interest on loan	23.8017	23.8017	23.8017	11.9012	0.00

BOND60 (LX) -LOAN 15

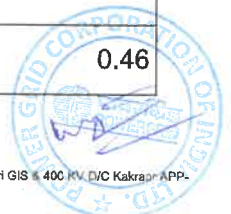
Gross Loan- Opening	160.37	160.37	160.37	160.37	160.37
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Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	160.37
Net loan-Opening	160.37	160.37	160.37	160.37	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	160.37	0.00
Net Loan-Closing	160.37	160.37	160.37	0.00	0.00
Average Net Loan	160.37	160.37	160.37	80.19	0.00
Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	11.5466	11.5466	11.5466	5.7737	0.00

SBI-04 -ADD CAP 2019-20					
Gross Loan- Opening	14.37	14.37	14.37	14.37	14.37
Cumulative repayments of Loans upto previous year	2.79	4.23	5.67	7.10	8.54
Net loan-Opening	11.58	10.14	8.70	7.27	5.83
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	1.44	1.44	1.44	1.44	1.44
Net Loan-Closing	10.14	8.70	7.26	5.83	4.39
Average Net Loan	10.86	9.42	7.98	6.55	5.11
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.8905	0.7724	0.6544	0.5371	0.419

SBI-04 -ADD CAP 2020-21					
Gross Loan- Opening	4.56	4.56	4.56	4.56	4.56
Cumulative repayments of Loans upto previous year	0.89	1.34	1.80	2.25	2.71
Net loan-Opening	3.67	3.22	2.76	2.31	1.85
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.46	0.46	0.46	0.46	0.46



Net Loan-Closing	3.21	2.76	2.30	1.85	1.39
Average Net Loan	3.44	2.99	2.53	2.08	1.62
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.2821	0.2452	0.2075	0.1706	0.1328

SBI-04 -ADD CAP 2023-24

Gross Loan- Opening	4.61	4.61	4.61	4.61	4.61
Cumulative repayments of Loans upto previous year	0.90	1.36	1.82	2.28	2.74
Net loan-Opening	3.71	3.25	2.79	2.33	1.87
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.46	0.46	0.46	0.46	0.46
Net Loan-Closing	3.25	2.79	2.33	1.87	1.41
Average Net Loan	3.48	3.02	2.56	2.10	1.64
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.2854	0.2476	0.2099	0.1722	0.1345

SBI-04 -LOAN 16

Gross Loan- Opening	67.84	67.84	67.84	67.84	67.84
Cumulative repayments of Loans upto previous year	13.19	19.97	26.76	33.54	40.32
Net loan-Opening	54.65	47.87	41.08	34.30	27.52
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	6.78	6.78	6.78	6.78	6.78
Net Loan-Closing	47.87	41.09	34.30	27.52	20.74
Average Net Loan	51.26	44.48	37.69	30.91	24.13
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	4.2033	3.6474	3.0906	2.5346	1.9787



ICICI (3270 CR.) (Replaced with Bond LXII) - LOAN 17

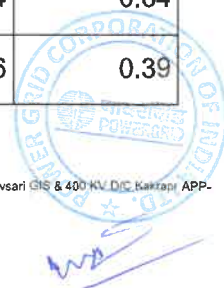
Gross Loan- Opening	0.76	0.76	0.76	0.76	0.76
Cumulative repayments of Loans upto previous year	0.00	0.15	0.30	0.46	0.61
Net loan-Opening	0.76	0.61	0.46	0.30	0.15
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.15	0.15	0.15	0.15	0.15
Net Loan-Closing	0.61	0.46	0.31	0.15	0.00
Average Net Loan	0.69	0.54	0.39	0.23	0.08
Rate of Interest on Loan on Annual Basis	8.36	8.36	8.36	8.36	8.36
Interest on loan	0.0577	0.0451	0.0326	0.0192	0.0067

Bond - LXIV -ADD CAP 2019-20

Gross Loan- Opening	26.12	26.12	26.12	26.12	26.12
Cumulative repayments of Loans upto previous year	0.00	7.84	7.84	7.84	7.84
Net loan-Opening	26.12	18.28	18.28	18.28	18.28
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	7.84	0.00	0.00	0.00	0.00
Net Loan-Closing	18.28	18.28	18.28	18.28	18.28
Average Net Loan	22.20	18.28	18.28	18.28	18.28
Rate of Interest on Loan on Annual Basis	7.49	7.49	7.49	7.49	7.49
Interest on loan	1.6628	1.3692	1.3692	1.3692	1.3692

HDFC (Rs.5000 Cr.) -ADD CAP 2021-22

Gross Loan- Opening	0.64	0.64	0.64	0.64	0.64
Cumulative repayments of Loans upto previous year	0.32	0.32	0.32	0.36	0.39



Net loan-Opening	0.32	0.32	0.32	0.28	0.25
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	0.03	0.03	0.03
Net Loan-Closing	0.32	0.32	0.29	0.25	0.22
Average Net Loan	0.32	0.32	0.31	0.27	0.24
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	0.0259	0.0259	0.0251	0.0219	0.0194

Summary

Gross Loan- Opening	22,136.95	22,136.95	22,136.95	22,136.95	22,136.95
Cumulative repayments of Loans upto previous year	7,869.92	9,900.95	11,208.83	13,798.67	16,001.92
Net loan-Opening	14,267.03	12,236.00	10,928.12	8,338.28	6,135.03
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	2,031.03	1,307.90	2,589.87	2,203.26	1,022.89
Net Loan-Closing	12,236.00	10,928.10	8,338.25	6,135.02	5,112.14
Average Net Loan	13,251.54	11,582.07	9,633.21	7,236.69	5,623.61
Rate of Interest on Loan on Annual Basis	8.076	8.0261	8.0072	8.0421	8.0782
Interest on loan	1,070.1919	929.5838	771.3548	581.9805	454.2886

WSE
(Petitioner)



Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOCO Date	Jun 29, 2017

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the Year	365.00	365.00	365.00	366.00	365.00
No. of days for which Tariff claimed	365.00	365.00	365.00	366.00	365.00
Gross normative loan-Opening	22,032.99	22,052.63	22,052.63	22,052.63	22,052.63
Cumulative repayments of Normative loan upto previous year	11,118.41	12,809.17	14,493.75	16,177.81	17,830.82
Net normative loan-Opening	10,914.58	9,243.46	7,558.88	5,874.82	4,221.81
Addition in normative loan towards the ACE	19.64	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	1,690.76	1,684.58	1,684.06	1,653.01	1,645.70
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	9,243.46	7,558.88	5,874.82	4,221.81	2,576.11
Average normative loan	10,079.02	8,401.17	6,716.85	5,048.32	3,398.96
Weighted Average Rate of interest on actual loan	8.076	8.0261	8.0072	8.0421	8.0782
Interest on normative loan	813.98	674.29	537.83	405.99	274.57
Pro rata interest on normative loan	813.98	674.29	537.83	405.99	274.57

(Petitioner)



Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOCO Date	Jun 29, 2017

(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	81.38	0.00	81.38	81.38	3.34	2.72
Transmission Line	25,738.70	28.05	25,766.75	25,752.73	5.28	1,359.74
Sub Station	5,350.29	0.00	5,350.29	5,350.29	5.28	282.50
Comm. Sys. excluding Fiber Optic	255.75	0.00	255.75	255.75	15.00	38.36
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	49.57	0.00	49.57	49.57	15.00	7.44
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	31,475.69	28.05	31,503.74	31,489.72	0.00	1,690.76
Weighted Average Rate of Depreciation(%)					5.369244	

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



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Civil & Building	81.38	0.00	81.38	81.38	3.34	2.72
Transmission Line	25,766.75	0.00	25,766.75	25,766.75	5.28	1,360.48
Sub Station	5,350.29	0.00	5,350.29	5,350.29	5.28	282.50
Comm. Sys. excluding Fiber Optic	255.75	0.00	255.75	255.75	15.00	38.36
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	49.57	0.00	49.57	49.57	15.00	0.52
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	31,503.74	0.00	31,503.74	31,503.74	0.00	1,684.58
Weighted Average Rate of Depreciation(%)					5.347238	

2026-27						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	81.38	0.00	81.38	81.38	3.34	2.72
Transmission Line	25,766.75	0.00	25,766.75	25,766.75	5.28	1,360.48
Sub Station	5,350.29	0.00	5,350.29	5,350.29	5.28	282.50
Comm. Sys. excluding Fiber Optic	255.75	0.00	255.75	255.75	15.00	38.36
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	49.57	0.00	49.57	49.57	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	31,503.74	0.00	31,503.74	31,503.74	0.00	1,684.06
Weighted Average Rate of Depreciation(%)					5.345588	



2027-28						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	81.38	0.00	81.38	81.38	3.34	2.72
Transmission Line	25,766.75	0.00	25,766.75	25,766.75	5.28	1,360.48
Sub Station	5,350.29	0.00	5,350.29	5,350.29	5.28	282.50
Comm. Sys. excluding Fiber Optic	255.75	0.00	255.75	255.75	15.00	7.31
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	49.57	0.00	49.57	49.57	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	31,503.74	0.00	31,503.74	31,503.74	0.00	1,653.01
Weighted Average Rate of Depreciation(%)					5.247028	

2028-29						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	81.38	0.00	81.38	81.38	3.34	2.72
Transmission Line	25,766.75	0.00	25,766.75	25,766.75	5.28	1,360.48
Sub Station	5,350.29	0.00	5,350.29	5,350.29	5.28	282.50
Comm. Sys. excluding Fiber Optic	255.75	0.00	255.75	255.75	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	49.57	0.00	49.57	49.57	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	31,503.74	0.00	31,503.74	31,503.74	0.00	1,645.70



Weighted Average Rate of Depreciation(%)					5.223824	
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(Petitioner)



Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4				
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass				
Region	Western Region	DOC Date	Jun 29, 2017		

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/ Project	33.00	33.00	33.00	33.00	33.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	6.00	7.00	8.00	9.00	10.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	27.00	26.00	25.00	24.00	23.00
Capital Base					
1.4 Opening capital cost	31,475.69	31,503.74	31,503.74	31,503.74	31,503.74
1.5 Additional Capital Expenditure dr. the year	28.05	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	31,503.74	31,503.74	31,503.74	31,503.74	31,503.74
1.8 Average capital cost	31,489.72	31,503.74	31,503.74	31,503.74	31,503.74
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	49.57	49.57	49.57	49.57	49.57
1.11 Asset having 10% salvage value included in 1.8	31,440.15	31,454.17	31,454.17	31,454.17	31,454.17
1.12 Depreciable Value(1.10+90% of 1.11)	28,345.71	28,358.33	28,358.33	28,358.33	28,358.33
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	5.369244	5.347238	5.345588	5.247028	5.223824



1.14 Depreciation(for the period)	1,690.76	1,684.58	1,684.06	1,653.01	1,645.70
1.15 Depreciation(Annualised)	1,690.76	1,684.58	1,684.06	1,653.01	1,645.70
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	11,118.42	12,809.18	14,493.76	16,177.82	17,830.83
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	12,809.18	14,493.76	16,177.82	17,830.83	19,476.53

WZ

(Petitioner)



Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission System associated with Kakrapar Atomic Power Project-3&4		
Element Description	400 KV D/C Kakrapar APP-Navsari T/L along with associated bays at Navsari GIS & 400 KV D/C Kakrapar APP-Vapi T/L Aalong with ass		
Region	Western Region	DOCO Date	Jun 29, 2017

(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	25.40	26.74	28.14	29.62	31.18
Maintenance spares 15% of O&M Expenses	45.72	48.12	50.64	53.32	56.12
Receivables equivalent to 45 days of AFC	574.61	558.52	543.53	524.00	510.49
Total Working capital	645.73	633.38	622.31	606.94	597.79
Bank Rate as on 01.04.2024 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	76.84	75.37	74.05	72.23	71.14
Pro rata interest on working capital	76.84	75.37	74.05	72.23	71.14


(Petitioner)

**Summary of issue involved
in the petition**

**PART-III
FORM- 15**

1. Name of the Petitioner	Power Grid Corporation of India Limited			
2. Petition Category	Transmission			
3. Tariff Period	2019-24 and 2024-29			
4. Name of the Project	400 kV D/C Kakrapar APP-Navsari Transmission Line along with associated bays at Navsari GIS and 400 kV D/C Kakrapar APP-Vapi Transmission Line along with associated bays at Vapi Sub-station in the Western region			
5. Investment Approval date	-			
6. SCOD of the Project	-			
7. Actual COD of the project	-			
8. Whether entire scope is covered in the present petition.	Yes			
9. No. of Assets covered in instant petition	1			
10. No. of Assets having time over run	-			
11. Estimated Project Cost as per IA	37871.21			
12. Is there any RCE? if so, provide the date	No			
13. Revised Estimated Project Cost (if any)	-			
14. Completion cost for all the assets covered in the instant petition.	31503.75			
15. No. of Assets covered in instant petition and having cost overrun.	-			
16	Prayer in brief			
17	Key details and any Specific issue involved			
18	Respondents			
	Name of Respondents			
	1	MADHYA PRADESH POWER MANAGEMENT COMPANY LTD	6	CHHATTISGARH STATE POWER DISTRIBUTION CO. LTD
	2	MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.	7	NPCIL
	3	GUJARAT URJA VIKAS NIGAM LTD.		
	4	ELECTRICITY DEPARTMENT, GOA		
	5	DNH and DD Power Corporation Ltd		

(Petitioner)



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

PART-III
Check List

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

