THE CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

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 asset: 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation under "1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening" under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

Power Grid Corporation of India Ltd.

--- PETITIONER

Registered office: B-9, Qutab Institutional Area,

Katwaria Sarai, New Delhi. 110 016.

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

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

--- RESPONDENT(S)

Uttar Pradesh Power Corporation Ltd.

Shakti Bhawan, 14, Ashok Marg

Lucknow - 226 001

Represented by Its Chairman

And others

GURGAON

FILED BY

POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

DATED:27.06.2025

(V.C. Sekhar)

Sr. General Manager (Regulatory Cell)

THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

PETITION NO.:	PETI [*]	TION	NO.:		
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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 asset: 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation under "1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening" under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

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FILED BY

POWER GRID CORPORATION OF INDIA LTD.

GURGAON

REPRESENTED BY

DATED:27.06.2025

(V.C. Sekhar)

Sr. General Manager (Regulatory Cell)

THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

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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 asset: 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation under "1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening" under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

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Uttar Pradesh Power Corporation Ltd.

---- RESPONDENT(S)

Shakti Bhawan, 14, Ashok Marg

Lucknow - 226 001

Represented by Its Chairman

And others

Tο

The Secretary

Central Electricity Regulatory Commission

New Delhi 110001

Sir,

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

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

GURGAON FILED BY

DATED:-27.06.2025

POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY

(V.C. Sekhar)

Sr. General Manager (Regulatory Cell)

THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

PETIT	TION	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 asset: 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation under "1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening" under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

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Registered office: B-9, Qutab Institutional Area,

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Uttar Pradesh Power Corporation Ltd.

---- RESPONDENT(S)

Shakti Bhawan, 14, Ashok Marg

Lucknow - 226 001

Represented by Its Chairman

And others

MEMO OF PARTIES

Power Grid Corporation of India Ltd.

--- PETITIONER

VERSUS

Northern Region

--- RESPONDENT

 UTTAR PRADESH POWER CORPORATION LTD. SHAKTI BHAWAN, 14, ASHOK MARG LUCKNOW - 226 001 REPRESENTED BY ITS CHAIRMAN

- 2. AJMER VIDYUT VITRAN NIGAM LTD CORPORATE OFFICE, VIDYUT BHAWAN, PANCHSHEEL NAGAR, MAKARWALI ROAD AJMER-305004 (RAJASTHAN) REPRESENTED BY ITS MANAGING DIRECTOR
- 3. JAIPUR VIDYUT VITRAN NIGAM LTD
 132 KV, GSS RVPNL SUB- STATION BUILDING,
 CALIGIRI ROAD, MALVIYA NAGAR, JAIPUR-302017
 (RAJASTHAN)
 REPRESENTED BY ITS MANAGING DIRECTOR
- 4. JODHPUR VIDYUT VITRAN NIGAM LTD NEW POWERHOUSE, INDUSTRIAL AREA, JODHPUR – 342 003(RAJASTHAN) REPRESENTED BY ITS MANAGING DIRECTOR
- 5. HIMACHAL PRADESH STATE ELECTRICITY BOARD VIDYUT BHAWAN KUMAR HOUSE COMPLEX BUILDING II SHIMLA-171 004 REPRESENTED BY ITS CHAIRMAN
- 6. PUNJAB STATE POWER CORPORATION LIMITED THE MALL, PSEB HEAD OFFICE, PATIALA 147 001 REPRESENTED BY ITS CMD
- 7. HARYANA POWER PURCHASE CENTRE SHAKTI BHAWAN, SECTOR-6 PANCHKULA (HARYANA) 134 109 REPRESENTED BY ITS S.E. / C & R-1
- 8. JAMMU KASHMIR POWER CORPORATION LIMITED 220/66/33 KV GLADNI SS SLDC BULIDING NARWAL, JAMMU REPRESENTED BY ITS CHAIRMAN
- BSES YAMUNA POWER Ltd,
 B-BLOCK, SHAKTI KIRAN, BLDG.
 (NEAR KARKADOOMA COURT),
 KARKADOOMA 2ND FLOOR, NEW DELHI-110092
 REPRESENTED BY ITS CEO
- 10. BSES RAJDHANI POWER Ltd,
 BSES BHAWAN, NEHRU PLACE,
 NEW DELHI
 REPRESENTED BY ITS CEO

11. TATA POWER DELHI DISTRIBUTION LTD.
33 KV SUBSTATION, BUILDING
HUDSON LANE, KINGSWAY CAMP
NORTH DELHI - 110009
REPRESENTED BY ITS CEO

- 12. CHANDIGARH ELECTRICITY DEPTT.
 CHANDIGARH ADMINISTRATION
 SECTOR -9, CHANDIGARH.
 REPRESENTED BY ITS CHIEF ENGINEER
- 13. UTTARAKHAND POWER CORPORATION LTD.
 URJA BHAWAN, KANWALI ROAD DEHRADUN.
 REPRESENTED BY ITS MANAGING DIRECTOR
- 14. NORTH CENTRAL RAILWAY
 ALLAHABAD.
 REPRESENTED BY CHIEF ELECTRICAL DISTR. ENGINEER
- 15.NEW DELHI MUNICIPAL COUNCIL PALIKA KENDRA, SANSAD MARG, NEW DELHI-110002 REPRESENTED BY CHAIRMAN

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY

DATED:27.06.2025

GURGAON

(V.C. Sekhar)

Sr. General Manager (Regulatory Cell)

THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

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

IN THE MATTER OF: Petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for asset: 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation under "1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening" under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

Power Grid Corporation of India Ltd.

--- PETITIONER

Registered office: B-9, Qutab Institutional Area,

Katwaria Sarai, New Delhi. 110 016.

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

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

Uttar Pradesh Power Corporation Ltd.

Shakti Bhawan, 14, Ashok Marg

Lucknow - 226 001

Represented by Its Chairman

And others

--- RESPONDENT(S)

MEMO OF APPEARANCE

POWER GRID CORPORATION OF INDIA LTD.

-- PETITIONER

- 1. Shri Dilip Nagesh Rozekar, ED (Commercial & RC), POWERGRID
- 2. Shri V.C. Sekhar, Sr. GM (Commercial-RC), POWERGRID
- 3. Shri Zafrul Hasan, GM (Comml- Petition), POWERGRID
- 4. Shri Angaru Naresh Kumar, DGM, POWERGRID
- Smt Suchitra Gautam, DGM, POWERGRID
- 6. Shri Vishal Sagar, DGM, POWERGRID

- 7. Shri G. Vijay, DGM, POWERGRID
- 8. Shri Vivek Kumar Singh, DGM, POWERGRID
- 9. Smt. Supriya Singh, CM (Law), POWERGRID
- 10. Shri Arjun Malhotra, Manager (Law), POWERGRID
- 11. Smt. Tanushree Rao, DM (Law), POWERGRID

I, V.C. Sekhar, 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 27th day of June 2025.

PETITIONER POWER GRID CORPORATION OF INDIA LTD.

GURGAON (V.C. Sekhar)

DATED:27.06.2025 Sr. General Manager (Regulatory Cell)

THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

PFTI	LIUN	NO ·	
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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 asset: 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation under "1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening" under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

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Uttar Pradesh Power Corporation Ltd.

---- RESPONDENT(S)

Shakti Bhawan, 14, Ashok Marg

Lucknow - 226 001

Represented by Its Chairman

And others

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 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 Northern Region of India. The respondents are also 'Designated Inter State Transmission Customer' (hereinafter referred to as 'DICs') from the Northern Region in terms of the 2020 Sharing Regulations.

3. Background of Transmission Assets:

POWERGRID is filing the present petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for the below asset which have been implemented under ""1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening":

Asset No	Asset Name	DOCO
Asset-1	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation	08-07-2023

4. Summary of Claims:

A. POWERGRID is seeking truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for aforesaid transmission asset on capital cost comprising of expenditure incurred/Admitted up to 31.03.2019/DOCO and additional capital expenditure during 2019-24 & 2024-29 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 apportioned approved cost vis-à-vis claimed capital cost as on COD and additional capital expenditure during 2019-24 and 2024-29 tariff block are as under:

₹ in lakhs

	Asset No.	Apportioned approved cost	Expenditure Up to COD (i.e.	Expenditure during 2019-24 tariff block	Capital Cost as
ASSEL NO.	as per FR	08.07.2023)	2023-24	on 31.03.2024	
	Asset-1	3141.00	1937.8	848.42	2786.19

₹ in lakhs

Asset	Apportioned approved cost as per FR	Expenditure Up to 31.03.2024	Ac	Estimated completion				
No.			2024-25	2025- 26	2026- 27	2027- 28	2028- 29	Cost as on 31.03.2029
Asset-1	3141.00	2786.19	3.77	241.33	0.00	0.00	0.00	3031.29

6. Details of tariff claimed are as under:

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

₹ in Lakhs

Name of the asset	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
	AFC approved	0.00	0.00	0.00	0.00	469.25
Asset-1	Revised AFC based on truing up	0.00	0.00	0.00	0.00	487.46

Tariff claimed for 2024-29 tariff block:

₹ in Lakhs

Name of the asset	2024-25	2025-26	2026-27	2027-28	2028-29
Asset-1	637.38	655.93	673.82	672.12	671.68

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.

Detailed Petition:

MOST RESPECTFULLY SHOWETH:

<u>Issue wise submission(s):</u>

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

Asset No	Asset Name	DOCO	Earlier covered under petition no
Asset-1	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation	08-07-2023	90/TT/2024

The entire scope of the project is covered under instant petition.

11. Approval of the Scheme:

The Investment Approval and the expenditure sanction of the transmission project were accorded by the competent authority on 4.2.2022 and circulated vide Memorandum Ref.: C/CP/PA2122-11-0AAB-IA033 dated 7.2.2022, at an estimated cost of ₹3141.00 lakh including an IDC of ₹88.00 lakh based on the September 2021 price level.

12. Cost details:

The details of Capital Cost admitted for 2019-24 tariff block vide order dated 27.01.2025 in petition no. 90/TT/2024 for the asset: 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation covered in instant petition, and capital cost now claimed for the truing up of 2019-24 are as tabulated below:

CERC order	CERC order in petition no: 90/TT/2024 dated: 27.01.2025							
	Apportioned	Expenditure	Add -Cap 2019-24	Capital cost as				
Asset	approved cost as per FR	Up to COD (i.e. 08.07.2023)	2023-24	on 31.03.2024				
Asset-1	3141.00	1935.09*	566.18*	2501.27				
Capital Cost	now claimed in the in	stant petition						
Accet	Apportioned	Expenditure	Add -Cap 2019-24	Capital cost as				
Asset	approved cost as per FR	Up to COD (i.e. 08.07.2023)	2023-24	on 31.03.2024				
Asset-1	3141.00	1937.77	848.42	2786.19				

*Hon'ble Commission vide order dated: 27.01.2025 in petition no: 90/TT/2024 disallowed IDC of ₹ 31.40 Lakhs (₹21.62Lakhs from COD & ₹9.78Lakhs from 2023-24) & IEDC of ₹14.83 Lakhs (Total ₹ 46.23 Lakhs) due to time overrun for Asset-1.

Copy of order dated:27.01.2025 in petition no. 90/TT/2024 enclosed as Encl-1.

Capital cost for 2024-29 tariff block:

₹ in Lakhs

Asset	Approved Cost as per	Expenditure Up to	Projected	•	re during lock	g 2024-2	29 tariff	Estimated completion Cost as on
No.	Cost as per FR	31.03.2024	2024-25	2025-26	2026-27	2027-28	2028-29	31.03.2029
Asset-1	3141.00	2786.19	3.77	241.33	0.00	0.00	0.00	3031.29

A copy of auditor certificate is enclosed at **Encl-2**.

The overall Completion cost as on 31.03.2029 of the project is within the Approved apportioned FR cost.

13. <u>Initial spares:</u>

Detailed calculation of Initial Spares, as per Regulation 23 of Tariff Regulations, 2019 is tabulated below: -

Rs in lakhs

Acceta	Particulars	Cost for Spare	Initial Spares	Ceiling Limit (%)	Initial Spares Allowable	Excess initial spares
Assets	Farticulars	Calculation (A)	Claimed (B)	(C)	D = [(A-B)*C /(100-C)]	[B-D]
Asset-1	Substation (Brown Field)	2984.58	125.23	6.0	182.51	-57.28

It is submitted that the initial spare for the instant asset has been calculated as per limit specified under Regulation 23 of Tariff Regulations, 2019 and revised Auditor certificate. The initial spares claimed in the instant petition are within the specified limit.

It is further mentioned that expenditure on initial spares included in the auditor certificate as per actual cash expenditure incurred (means the initial spares discharged upto DOCO included in the DOCO cost of auditor certificate and discharged after DOCO has included in the additional capital expenditure of respective year in the auditor certificate). Discharge of initial spares as included in the auditor certificate is given below. Since the expenditure on initial spares are included in the auditor certificate as per cash outflow, it is requested to Hon'ble Commission to allow the same as claimed in the petition.

(₹ in Lakhs)

		Expenditure on initial	Expenditure	Expenditure	Expenditure
Asset	Total spares Claimed	Spares Upto COD and included in auditor certificate upto COD	on initial spares in 2023-24 (Add Cap)	on initial spares in 2024-25 (Add Cap)	on initial spares in 2025-26 (Add Cap)
Asset-1	125.23	6.93	111.79	0.00	6.51

Therefore, it is prayed to this Hon'ble Central Commission to allow the initial spares as claimed in the present petition.

14. Details of the Additional Capitalization

Additional capitalization claimed under Regulation:

SI No.	Asset	DOCO date	Cutoff date
1	Asset-1	08-07-2023	07-07-2023

Add cap for 2019-24 & 2024-29 block:

		Add	d cap detail (₹ in	Lakhs)	
Asset	2019-20	2020-21	2021-22	2022-23	2023-24
	0.00	0.00	0.00	0.00	848.42
Asset-1	Applicable F	Regulation (Tariff	Regulations, 20	19)	
	N A	N A	N A	N A	24 (1)(a) & 24 (1)(b)

Asset		Add cap detail (₹ in Lakhs)					
Asset	2024-25	2025-26	2026-27	2027-28	2028-29		
	3.77	241.33	0.00	0.00	0.00		
Asset-1	Applicable Re	gulation (Tariff	Regulations, 20	24)			
	24 (1)(b)	24 (1)(a) & 24 (1)(b)	N A	N A	N A		

It is submitted that the additional capitalization claimed for the Asset is within the original scope of the work. As on date there is nil 'previously recognized liabilities' to be discharged beyond 2024-29 tariff period.

Further, it is also submitted that the add cap approved by the Commission during 2019-24 tariff block 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 invoices from the contractor and incorporating the amendments till the end of Tariff block 2019-24. The additional capital expenditure claimed in the 2019-24 period is on account of undischarged liability towards final payment/withheld payment due to contractual exigencies and for works executed prior to the cut-off date. The projected additional capital expenditure claimed in the 2024-29 period is on account of undischarged liability towards final payment/withheld payment due to contractual exigencies for works executed prior to the cut-off date.

A liability flow statement having Package/ Contractor wise detail is enclosed at **Encl-3**.

15. Capital cost claimed for tariff purpose for 2019-24 and 2024-29 block:

Asset-1 ₹ In lakhs

SI No	Particulars	Building & civil work	Substation	Communication sys excluding OPGW	ΙΤ	Battery	Total
1	As per auditor certificate (upto DOCO)	0.00	1984	0.00	0.00	0.00	1984.00
2	Less: Accrual IDC not discharged up to DOCO	0.00	-12.46	0.00	0.00	0.00	-12.46
3	Less: IDC disallowed due to time overrun	0.00	-18.94	0.00	0.00	0.00	-18.94
4	Less: IEDC disallowed due to time overrun	0.00	-14.83	0.00	0.00	0.00	-14.83

SI No	Particulars	Building & civil work	Substation	Communication sys excluding OPGW	IT	Battery	Total
5	Exp. Up to DOCO excluding accrual IDC	0.00	1937.77	0.00	0.00	0.00	1937.77
6	Expenditure 2023-24 as per auditor certificate	0.00	827.68	0.00	20.74	0.00	848.42
7	Add: Accrual IDC up to DOCO (Discharge during 2023-24)	0.00	12.46	0.00	0.00	0.00	12.46
8	Less: IDC disallowed due to time overrun	0.00	-12.46	0.00	0.00	0.00	-12.46
9	Total Add Cap during 2023-24 (for tariff calculation)	0.00	827.68	0.00	20.74	0.00	848.42
10	Expenditure during 2024-25	0.00	3.77	0.00	0.00	0.00	3.77
11	Estimated Expenditure during 2025-26	0.00	239.45	0.00	1.88	0.00	241.33
12	Total estimated completion cost	0.00	3008.67	0.00	22.62	0.00	3031.29

Debt: Equity Ratio: The debt: equity ratio of 70:30 have been admitted by Hon'ble Commission as on 31.03.2019 and the same have been considered for cost as on 31.03.2019. Further the actual debt equity ratio deployed in instant asset is 70:30 for expenditure upto DOCO and all add-cap expenditures. Loan drawls as per actual expenditure have been depicted in Form-9C while Form-9E is as per cost claimed for tariff as mentioned at para-15 above after few deductions. Since the actual debt: equity ratio is 70:30, the same has been considered in Form-9E. It is prayed to Hon'ble Commission to consider debt: equity ratio of 70:30 for tariff computation.

Cash IDC Statement is enclosed at Encl-4.

16. <u>Transmission tariff:</u>

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

As per CERC Tariff Regulations 2024, the cut-off date for filing true up petitions for the 2019-24 tariff block was 30.11.2024. Subsequently CERC vide order no. 443/MP/2024, dt: 28.11.2024, para-9b directed the following:

Quote

"In the case of the existing assets, where the final orders for the 2019-24 tariff period are yet to be issued as on 31.3.2024, the tariff Petitions for truing up of the tariff for the 2019-24 tariff period and the determination of tariff for the 2024-29 tariff period may be filed by the Petitioner within six months from the date of issue of the final order for the 2019-24 tariff period.

Unquote

As the instant petition has been prepared in line with the direction of Hon'ble Commission passed vide order dated 28.11.2024 & 27.01.2025, the same qualifies the petitioner to file the instant petition within the timeframe of 6 months from the issuance of order dtd. 27.01.2025 in petition 90/TT/2024. Thus, the instant petition is being filed within prescribed timeline.

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 & 2023-24.

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	Actual Tax paid	31,32,12,38,737	1,79,26,53,31,597	17.472%	18.782%

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 FY 2021-22, FY 2022-23 and FY 2023-24 are based on the Income-tax returns filed, for the purpose of grossing up of ROE rate of respective years.

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

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

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

₹ In lakhs

Name of the asset	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
	AFC approved	0.00	0.00	0.00	0.00	469.25
Asset-1	Revised AFC based on truing up	0.00	0.00	0.00	0.00	487.36

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

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.

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

Name of the asset	2024-25	2025-26	2026-27	2027-28	2028-29
Asset-1	637.38	655.93	673.82	672.12	671.68

Tariff filing forms along with the other relevant information and supporting documents are attached hereto as **Encl-6**.

- **19.** The transmission assets shall complete 12 Yrs after 2024-29 tariff block, and thus the depreciation has been calculated as per clause 33 (5) of the CERC Tariff Regulations, 2024. The details have been computed and are provided in Form- 10 A.
- 20. 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.
- 21. 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 17 and para 18 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.

22. 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 the truing up petition of **POWERGRID works associated with Transmission System Strengthening in WR associated with Khargone TPS in Western region** with diary No. 716/2024. These documents/details are also available on our website www.powergrid.in.

- 23. The transmission charges at para-17 & 18 above is inclusive of O&M expenses derived for the subject asset based on the norms for O&M expenditure for Transmission System as specified under regulation 36 (3) (a) of the Tariff Regulations for block 2024-29.
- **24.** 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 has already been filed being no: 330/MP/2025 for truing up of security expenses from 01.04.2019 to 31.03.2024 under the Regulation 35 (3) (C) of Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2019 and recovery of security expenses from 01.04.2024 to 31.03.2029 under the Regulation 36 (3) (d) of Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2024.

Insurance:

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

Capital Spare:

With regard to Capital Spares, the Petitioner has filed a separate Petition bearing No 45/MP/2024 for claiming the capital spares under Tariff Regulation, 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 actual through a separate petition.

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

25. 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 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.

26. 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) and Regulation 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.

27. The Transmission Charges and other related Charges indicated at Para 17 & 18 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

28. Sharing of Transmission Charges

Tariff for Transmission of Electricity (Annual Fixed Cost) for 2019-24 as per para 17 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, 2020, as amended from time to time.

Tariff for Transmission of Electricity (Annual Fixed Cost) for 2024-29 as per para 18 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.

29. 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.-7 may please be treated as integral part of this petition.

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 asset covered under this petition, as per para 17 and 18 above.

- b) Admit the capital cost claimed and additional capitalization incurred during 2019-24 and projected to be incurred during 2024-29.
- 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 17 and 18 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 insurance expenses and consequential IOWC on that insurance expenses as mentioned at para 24 above.
- h) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall capital spares at the end of tariff block as per actual as mentioned at Para 24 above.
- Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition as mentioned at para 25 above.
- j) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any

taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries and

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

FILED BY

GURGAON

POWER GRID CORPORATION OF INDIA LTD.

DATED:-27.06.2025.

REPRESENTED BY

(V.C. Sekhar)

Sr. General Manager (Regulatory Cell)

THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

PETITIO	N N	0 •	
FEILIO	IN IN	U.:	

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 asset: 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation under "1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening" under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

Power Grid Corporation of India Ltd.

Registered office: B-9, Qutab Institutional Area,

--- PETITIONER

Katwaria Sarai, New Delhi. 110 016.

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

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

Uttar Pradesh Power Corporation Ltd.

---- RESPONDENT(S)

Shakti Bhawan, 14, Ashok Marq

Lucknow - 226 001

Represented by Its Chairman

And others

AFFIDAVIT VERIFYING THE PETITION

I, V.C. Sekhar, S/O Late Sh. V. Devaiah, working as Senior General Manager (Regulatory Cell) 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 Senior General Manager of Petitioner and is well conversant with the facts and the circumstances of the case and therefore competent to swear this affidavit.

28 OF INDIP

- 2. That the accompanying Petition under Section 62 of the Electricity Act, 2003, has been filed by my authorized 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 29 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 29 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

VERIFICATION

Solemnly affirmed at Gurgaon on this 27th day of June 2025 that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.

(DEPONENT)

ATTESTED

MAHENDER PUNIA ADVOCATE & NOTARY Distr. Gurug 29 (Harving) 184 Mahender S. Pun Regn. Na 3999



पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड

(भारत सरकार का उद्यम)

POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)

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)

Dilip Nagesh Rozekar

Executive Director (Commercial & RC)

दिलीप रोज़ेकर / DILIP ROZEKAN

Executive Director (Commercial & Regulatory Cell)

पावर ग्रिड कॉपरिशन ऑफ इंडिया लिमिटेड

Power Grid Corporation of India Ltd.
(बारस सरकार का उद्यम)/(A Govi. of India Enterprise)

Plot No.-2, Sector-29, Gurgaon-122 001 (Haryana)

CORPORATION OF INDICATION OF I

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

PETITION NO. 90/TT/2024

Coram:

Shri Jishnu Barua, Chairperson Shri Ramesh Babu V., Member Shri Harish Dudani, Member

Date of Order: 27.01.2025

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for the determination of transmission tariff from the COD to 31.3.2024 for the transmission asset: 1x500 MVA, 400/220 kV ICT (3rd) at 400/220 kV Sohawal (PG) Sub-station under "1x500 MVA, 400/220 kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening" in the Northern Region.

And in the matter of:

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

...Petitioner

Versus

1. Ajmer Vidyut Vitran Nigam Limited,

Corporate Office, Vidyut Bhawan, Panchsheel Nagar, Makarwali Road, Ajmer-305004.

2. Jaipur Vidyut Vitran Nigam Limited,

132 kV, GSS RVPNL Sub-station Building, Caligiri Road, Malviya Nagar, Jaipur-302017.

3. Jodhpur Vidyut Vitran Nigam Limited,

New Power House, Industrial Area, Jodhpur-342 003.

Order in Petition No. 90/TT/2024

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4. Himachal Pradesh State Electricity Board Limited,

Vidyut Bhawan, Kumar House Complex Building II, Shimla-171004.

5. Uttar Pradesh Power Corporation Limited,

Shakti Bhawan, 14, Ashok Marg, Lucknow-226001.

6. Haryana Power Purchase Centre,

Shakti Bhawan, Sector-6, Panchkula-134109.

7. Jammu Kashmir Power Corporation Limited,

220/66/33 kV Gladni Sub-station SLDC Building, Narwal, Jammu.

8. Punjab State Power Corporation Limited,

The Mall, PSEB Head Office, Patiala-147001.

9. BSES Yamuna Power Limited,

B-Block, Shakti Kiran Building (Near Karkardooma Court), Karkardooma, 2nd Floor, New Delhi-110092.

10. BSES Rajdhani Power Limited,

BSES Bhawan, Nehru Place, New Delhi.

11. Tata Power Delhi Distribution Limited,

33 kV Sub-station Building, Hudson Lane, Kingsway Camp, North Delhi-110009.

12. Uttarakhand Power Corporation Limited,

Urja Bhawan, Kanwali Road, Dehradun.

13. North Central Railway,

Allahabad.

14. New Delhi Municipal Council,

Palika Kendra, Sandsad Marg, New Delhi-110002.



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Order in Petition No. 90/TT/2024

15. Chandigarh Electricity Department,

UT-Chandigarh, Div-11, Opposite - Transport Nagar, Industrial Area Phase-I, Chandigarh.

...Respondent(s)

Party Present : Shri V. C. Shekhar, PGCIL

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 the determination of tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") from the date of commercial operation (COD) to 31.3.2024 in respect of its transmission asset, 1x500 MVA, 400/220 kV ICT (3rd) at 400/220 kV Sohawal (PG) Sub-station (hereinafter referred to as the "transmission asset") under "1x500 MVA, 400/220 kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening" in the Northern Region (hereinafter referred to as the "transmission project").

- 2. The Petitioner has made the following prayers in the instant Petition.
 - "1) Admit the capital cost as claimed in the Petition and approve the Additional Capitalization incurred / projected to be incurred.
 - 2) Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para 8.3 above.
 - 3) Condoned the Time overrun in commissioning of the instant asset.
 - 4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8 above for respective block.
 - 5) 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.

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- 6) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
- 7) Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses separately.
- 8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.
- 10) Allow interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.

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

Background

- The brief facts of the case are as under:
 - a) The Investment Approval (the IA) and the expenditure sanction of the transmission project were accorded by the competent authority of the Petitioner on 4.2.2022 and circulated vide Memorandum Ref.: C/CP/PA2122-11-0AAB-IA033 dated 7.2.2022, at an estimated cost of ₹3141.00 lakh including an IDC of ₹88.00 lakh based on the September 2021 price level.
 - b) The scope of the transmission project was discussed and agreed upon in the 3rd meeting of NRPCTP held on 19.2.2021 and the 47th TCC and the 49th NRPC meeting held on 24.9.2021. Further, the transmission project has also been recommended for implementation through the Regulated Tariff Mechanism (RTM) route in the 5th meeting of the National Committee on Transmission (NCT) held on 25.8.2021 and 2.9.2021. Subsequently, the

Ministry of Power (MoP), GoI, vide OM (Ref. No. 15/3/2018-Trans-Part (1)) dated 1.12.2021 awarded the transmission project to CTUIL for implementation under the RTM. Further, CTUIL vide letter Ref. No: C/CTUIL/OM/02 dated 2.12.2021, awarded the Petitioner to implement the transmission project.

c) The scope of work covered under the transmission project is as follows:

Sub-station

a) Augmentation with 400/220 kV, 1x500 MVA, Transformer (3rd) at Sohawal (PG) Sub-station

400 kV: 1x500 MVA, 400/230 kV Transformer

1 No. ICT Bay (AIS)

220 kV: 1 No. ICT Bay (AIS)

- d) The transmission asset under the transmission project has been completed.
- e) As per the IA dated 4.2.2022, the transmission project was scheduled to be commissioned in February 2023. Hence, the scheduled date of commercial operation (SCOD) of the transmission project comes to 28.2.2023, against which the transmission asset was commissioned on 8.7.2013. The details of the SCOD, COD and time over-run are as follows:

SCOD	COD	Delay (in days)
28.2.2023	8.7.2023	129

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

- 5. The Petitioner has served the Petition on the Respondents, and notice of this Petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. None of the Respondents have filed their reply to the Petition.
- 6. This order is issued considering the submissions made by the Petitioner vide affidavits dated 1.1.2024 and 26.4.2024.
- 7. After hearing the matter on 8.11.2024, the order was reserved. Having heard the representative of the Petitioner and perused the material on record, we proceed to dispose of the Petition.

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

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

	(₹ in lakh)
Particulars	2023-24 (pro-rata 268 days)
Depreciation	87.76
Interest on Loan	84.27
Return on Equity	93.23
Interest on Working Capital	12.50
O&M Expenses	196.43
Total	474.19

9. The Petitioner has claimed the Interest on Working Capital (IWC) for the transmission asset for the 2019-24 tariff period as follows:

	(₹ in lakh <u>)</u>		
Particulars	2023-24 (pro-rata 268 days)		
O&M Expenses	22.35		
Maintenance Spares	40.24		
Receivables	79.62		
Total Working Capital	142.21		
Rate of Interest (in %)	12.00		
Interest on Working Capital	12.50		

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Date of Commercial Operation (COD)

- 10. The Petitioner has claimed the actual COD of the transmission asset as 8.7.2023. To support its claim, the Petitioner has submitted a copy of the Energisation Certificate dated 14.6.2023 under Regulation 43 of the Central Electricity Authority (Measures relating to Safety and Electric Supply), Regulations 2010, RLDC Charging Certificate dated 11.8.2023 certifying the completion of successful trial operation on full load on 7.7.2023, the CMD certificate as required under the Grid Code, and self-declaration of COD letter dated 21.8.2023 in support of the actual COD of the transmission asset.
- 11. With respect to the date of commercial operation of a transmission system or element thereof and associated communication system, Regulation 5 of the 2019 Tariff Regulations provides as follows:
 - **"5. Date of Commercial Operation:** (1) The date of commercial operation of a generating station or unit thereof or a transmission system or element thereof and associated communication system shall be determined in accordance with the provisions of the Grid Code.
 - (2) In case the transmission system or element thereof executed by a transmission licensee is ready for commercial operation but the interconnected generating station or the transmission system of other transmission licensee as per the agreed project implementation schedule is not ready for commercial operation, the transmission licensee may file petition before the Commission for approval of the date of commercial operation of such transmission system or element thereof:

Provided that the transmission licensee seeking the approval of the date of commercial operation under this clause shall give prior notice of at least one month, to the generating company or the other transmission licensee and the long term customers of its transmission system, as the case may be, regarding the date of commercial operation:

Provided further that the transmission licensee seeking the approval of the date of commercial operation of the transmission system under this clause shall be required to submit the following documents along with the petition:

- (a) Energisation certificate issued by the Regional Electrical Inspector under Central Electricity Authority;
- (b) Trial operation certificate issued by the concerned RLDC for charging element with or without electrical load:
- (c) Implementation Agreement, if any, executed by the parties;



- (d) Minutes of the coordination meetings or related correspondences regarding the monitoring of the progress of the generating station and transmission systems;
- (e) Notice issued by the transmission licensee as per the first proviso under this clause and the response;
- (f) Certificate of the CEO or MD of the company regarding the completion of the transmission system including associated communication system in all respects."
- 12. We have considered the Petitioner's submissions. The copies of the CEA Energisation Certificate, and 'on-load' RLDC Charging Certificate are as follows:



भारत सरकार/Govt. of India चिद्युत मंत्रालय/Ministry of Power केन्द्रीय विद्युत प्राधिकरण/Central Electricity Authority

गुख्य विद्युत निरीक्षणालय प्रभाग/Chief Electrical Inspectorate Division

CEI/2/EI/RIO (N)/Insp./2023/ 318

Dated: 14.06.2023

Approval for Energisation

Sh. Vineet Kumar, General Manager, PGCII., 400/220kV Sobawai S/s, Village: - Muzffarpur, Post: Akhtiyiarpur, Near Lohia Pul, Bhelsar, Ayadhya.

Subject: Approval for Energisation of 1 No. 1CT (500 MVA) and other installations in Bay No. 406 and electrical installations in Bay No. 204 as mentioned in List of Equipments in application of PGCH., Sohoval S/s under Regulation 43 of the Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2010 (as amended).

Ref.:

- 1. Online Application A/2023/11535 dated 17.05.2023.
- 2 CEI/2/EI/RIO (N)/Insp./2023/295 dated: 06.06.2023
- 3 Your compliance report dated: 13.06.2023

Whereas the inspection of 1 No. ICT (500 MVA) and other installations in Bay No. 406 and electrical installations in Bay No. 204 as mentioned in List of Equipments in application of PGCIL. Sohowal S/s was carried out by the undersigned on 03.06.2023.

The non-compliances of certain provisions/stipulations of the regulations were conveyed to you vide our office letter under reference at St. No. (2) above (Inspection Report) and the compliance of the same has since been received vide your letter under reference at St.No. (3) above. The Approval for energization of 1 No. ICT (500 MVA) and other installations in Bay No. 406 and electrical installations in Bay No. 204 as mentioned in List of Equipments (attached herewith) in application of PGCIL, Sohowal S/s is hereby accorded subject to consistent compliance of relevant provisions of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 tax amended till date) by PGCIL.

A.

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ग्रिंड कंट्रोलर ऑफ इंडिया लिमिटेड GRID CONTROLLER OF INDIA LIMITED



(A Government of India Enterprise)

[formerly Power System Operation Corporation Limited (POSOCO)] उत्तर क्षेत्रीय बार प्रेषण केन्द्र / Northern Regional Load Despatch कार्यांचयः 18 ए. शहीर जीत सिंह सगरानगात गार्ग, कहणारिया स्थाय, वई दिल्ली 110016 Office : 18-A, Shaheed Jeet Singh Sansanwal Marg, Katwaria Sarai, New Delhi-110010 CIN : U40105DL2009GOI188682, Website : www.nidc.in, E-mail : nido@grid-india.in, Tel. 011-26854015, 40224603

Certificate Number: GRID-INDIA/NRLDC/SO/438

Certificate of completion of Trial Operation of 400/220/33kV, 500 MVA, 3-Phase, TOSHIBA, ICT - 3 along with associated bays no 406 (400kV side) and 204 (220kV side) at Sohawal(PG) Reference:

- 1. POWERGRID Communication dated 12 Apr 2023 11:56, 12 Apr 2023 12:01, 13 Apr 2023 12:35, vide Format I and 08 Jun 2023 15:17, 09 Jun 2023 14:52, 17 Jun 2023 06:42, 22 Jun 2023 15:59, vide Format - III regarding the submission of pre charging documents for -
- i) 400/220/33kV, 500 MVA, 3-Phase, TOSHIBA, ICT 3 at Sohawai(PG)
- ii) 400kV Main Bay 406 of 400/220/33KV,500MVA,3-Ph,ICT-III(400 KV SIDE) at Sohawal(PG)
- iii) 220kV Main Bay 204 of 400/220/33kV,500MVA. 3-Ph , ICT-III (220kv Side) at Sohawal(PG)
- 2. NRLDC Acknowledgement vide Format II 19 Apr 2023 09:19 and Provisional Approval vide Format IV 26 Jun
- Real time code issued by NRLDC on request of POWERGRID Real Time Code No-2306 5690
- 4. POWERGRID, Communication dated 04 Jul 2023 13:11, vide Format V regarding the submission of post charging

Based on above references, it is hereby certified that the following Transmission elements have been successfully completed the trial operation:

Name of the Transmission Asset:	1.400/220/33kV, 500 MVA, 3-Phase, TOSHIBA, ICT - 3 along with associated bays no 406 (400kV side) and 204 (220kV side) at Sohawal(PG)
Owner of the Transmission Asset:	1. POWERGRID
Date and Time of Energization for commencement of successful trial run operation	1. 06.07.2023- 18:00 hrs.
Date/Time of completion of successful trial run operation	2. 07.07.2023- 18:00 hrs.

There is one and half breaker scheme at 400kV Sohawal(PG) and dia (both main and tie bay) is in charged condition.

This certificate is being issued in accordance with Regulation 6.3(A)(5) of CERC(Indian Electricity Grid Code) Regulation, 2010 to certify successful completion of trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.

Executive Director

11/8/2023 Nabarun Roy

13. Taking into consideration the CEA Energization Certificate, RLDC Charging Certificate, and CMD Certificate, the COD of the transmission asset is approved as 8.7.2023.



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Capital Cost

- 14. Regulation 19 of the 2019 Tariff Regulations provides as under:
 - **"19.** Capital Cost: (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.
 - (2) The Capital Cost of a new project shall include the following:
 - (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
 - (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
 - (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
 - (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
 - (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
 - (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
 - (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
 - (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation:
 - (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal 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;
 - 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

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- 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."
- 15. The Petitioner has claimed the following capital cost incurred as on COD and Additional Capital Expenditure (ACE) projected to be incurred in respect of the



transmission asset and has submitted the Auditor's Certificate dated 21.11.2023 in support of the same:

(₹ in lakh)

FR	Capital	F	Projected AC	Estimated	
Approved cost	cost as on COD	2023-24	2024-25	2025-26	Completion Cost as on 31.3.2024
3141.00	1984.00	563.50	563.50	0.00	3111.00

Cost Overrun

- 16. The Petitioner has submitted that there is a cost variation between the FR approved cost and the estimated completion cost.
- 17. The Petitioner has submitted the item-wise cost variation details between the FR approved cost and the estimated completion cost and the same are as follows:

(₹ in lakh)

SI. No	Description	FR Approved Cost	Estimated Capital Cost	Variation (-decrease + increase)
		а	b	c = b - a
В	Sub-stations			
1	Foundation for structures	168.27	195.65	27.38
2	Miscellaneous Civil works	20.00	0	-20
3	Transformer	1946.31	2221.81	275.50
4	Switchgear (CT, PT, CB, Isolator etc.)	223.05	146.83	-76.22
5	Control, Relay and Protection Panel	103.91	100.75	-3.16
6	Structure for switchyard	45.21	80.49	35.28
7	Miscellaneous (Auxiliaries)	92.54	147.3	54.76
8	Spares	84.69	125.23	40.54
9	Over heads	369.02	58.86	-310.16
10	Interest During Construction (IDC)	88.00	34.08	-53.92
	TOTAL	3141.00	3111.00	-30.00

18. The Petitioner has further submitted the following major reasons for cost variation with respect to FR:

i. Decrease in IDC and IEDC Cost:

There is a reduction of around ₹364 lakh (with respect to IDC and IEDC) based on the actual cost.

ii. Variation in Equipment Cost

- a) Being a Government enterprise, the Petitioner has an obligation to the indigenous development of manufacturing as well as to adhere to the Government of India guidelines in vogue. Accordingly, the Petitioner has been following a well laid down procurement policy which ensures both transparency and competitiveness in the bidding process. The route of a Domestic Competitive Bidding process has been followed to award the transmission project. Through this process, the lowest possible market prices for required products/services/as per detailed designing were obtained, and the contracts were awarded on the basis of the lowest evaluated eligible bidder. The best competitive bid prices against the tenders may vary as compared to the cost estimate depending upon the prevailing market conditions, design, and site requirements. Whereas, the estimates are prepared by the Petitioner as per well-defined procedures for cost estimate. The FR cost estimate is a broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts/general practice. The cost received during Domestic Competitive Bidding for the transformer is higher than the estimated cost.
- 19. We have considered the Petitioner's submissions. As the estimated completion cost of the transmission asset ₹3111.00 lakh is within the approved FR cost of ₹3141.00 lakh and thus there is no cost over-run with respect to the transmission asset. Therefore, the capital cost claimed by the Petitioner is hereby allowed.

20. Further, for the 2019-24 tariff period, the capital cost as on the COD and ACE for the FY 2023-24 would be considered for the determination of transmission tariff up to 31.3.2024 in instant order.

Time over-run

21. As per the IA dated 4.2.2022, the transmission project was scheduled to be commissioned in February 2023. Also, as per the MoP OM dated 1.12.2021, the implementation timeframe for the transmission project was 15 months from the date of the OM. Accordingly, the scheduled commissioning date is 28.2.2023, against which the transmission project was put into commercial operation as per the following details:

IA date	SCOD	COD	Time over-run
4.2.2022	28.2.2023	8.7.2023	129 days

- 22. The Petitioner has submitted that there is a delay of 129 days in the commissioning of the transmission asset vis-à-vis the SCOD of February 2023. The IA was accorded on 4.2.2022. Subsequently, the LoA was placed on 27.4.2022. Thereafter, the Petitioner, with its project implementation expertise and experience, took all the efforts to complete the transmission project, and the transmission asset was commissioned on 8.7.2023.
- 23. Based on the unforeseen delay reasons, the Petitioner has requested that the delay in completing the transmission asset be condoned on merits being out of its control.
- 24. In response to the Technical Validation dated 15.4.2024, the Petitioner, vide affidavit dated 26.4.2024, has submitted the details of the reasons for time overrun,

correspondence exchanged, and chronology of the time overrun along with the required documents. The details of time over-run are as follows:

Activity	As per p	As per planned		As per Actual		
Activity	Start	Finish	Start	Finish	(In days)	
NOA	28.2.2022	28.2.2023	27.4.2022	26.4.2023	57	
Supplies	20.5.2022	15.1.2023	29.8.2022	5.5.2023	110	
Foundation	15.4.2022	15.12.2022	16.8.2022	14.3.2023	89	
Erection	15.11.2022	31.1.2023	15.3.2023	31.5.2023	120	
Stringing	1.2.2023	17.2.2023	1.6.2023	15.6.2023	118	
Testing and Commissioning	18.2.2023	28.2.2023	15.6.2023	7.7.2023	130	

Analysis & Decision

- 25. As per the IA dated 4.2.2022 and MoP OM dated 1.12.2021, the transmission asset was scheduled to be commissioned by 28.2.2023, against which it was put into commercial operation on 8.7.2023 with a time over-run of 129 days.
- 26. We have considered the Petitioner's submissions. On perusal of Form-12, it is noted that there is a substantial delay in supply as compared to the actual schedule which resulted in the time over-run in the commissioning of the transmission asset. We think it proper here to refer to Regulation 22(1) of the 2019 Tariff Regulations as under:
 - "22. Controllable and Uncontrollable factors: The following shall be considered as controllable and uncontrollable factors for deciding time over-run, cost escalation, IDC and IEDC of the project:
 - (1) The "controllable factors" shall include but shall not be limited to the following:
 - a. Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies or change in law or force majeure events; and
 - b. Delay in execution of the project on account of contractor or supplier or agency of the generating company or transmission licensee.
 - (2) The "uncontrollable factors" shall include but shall not be limited to the following:
 - a. Force Majeure events;
 - b. Change in law; and
 - c. Land acquisition except where the delay is attributable to the generating company or the transmission licensee."



27. In appreciation of the material placed on record, we are of the view that the Petitioner is unable to prove that the commissioning of the transmission asset was impacted by any change in law or force majeure events. As per Regulation 22(1)(b) of the 2019 Tariff Regulations, if the delay in the commissioning of the transmission asset is on account of the contractor or supplier or agency of the generating company or the transmission licensee, the same shall fall under the controllable factors. In the instant case, the delay reasons submitted by the Petitioner fall under the controllable factors. Hence, we are not inclined to condone the time over-run of 129 days. The details of time over-run condoned/not condoned in respect of the transmission asset are as under:

SCOD as per IA	Actual COD	Time over-	Time over- run condoned	Time over-run not condoned
28.2.2023	8.7.2023	129 days	0 days	129 days

<u>Interest During Construction (IDC) / Incidental Expenditure During Construction (IEDC)</u>

28. The Petitioner has claimed the IDC in respect of the transmission asset and has submitted the statement showing the computation of IDC, discharge of IDC liability as on COD, and thereafter as under:

			(₹ in lakh)
IDC as per the	IDC	IDC	IDC
Auditor's	Discharged up	discharged	discharged
Certificate	to the COD	during 2023-24	during 2024-25
34.08	21.62	12.46	0.00

29. We have considered the Petitioner's submissions. As discussed above in this order, the time overrun in the commissioning of the transmission asset has not been condoned. Accordingly, the IDC on a cash basis up to the COD has been worked out based on the loan details given in the statement showing the discharge of IDC and Form-9C for the transmission asset. The IDC claimed and considered as on the COD,

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and the summary of the discharge of IDC liability up to the COD and, thereafter, for the purpose of tariff determination subject to revision at the time of truing up is as follows:

IDC as per the Auditor's Certificate (A)	IDC disallowed (B)	IDC Allowed (C)=(A)- (B)	Undischarged IDC (D)	IDC allowed on COD (E)=(C)-(D)	(₹ in lakh) IDC discharged in 2023-24 (F)
34.08	31.40	2.68	2.68	0.00	2.68

30. Further, the Petitioner has submitted that the entire amount of IEDC for the transmission asset has been discharged up to the COD. As the time overrun for the transmission asset has not been condoned, there is a proportionate disallowance of IEDC of ₹14.83 lakh. Accordingly, the details of IEDC claimed as per the Auditor's Certificate, IEDC allowed/disallowed are as under:

		(₹ in lakh <u>)</u>
IEDC as per the Auditor's Certificate (A)	IEDC disallowed due to time over- run not condoned (B)	IEDC allowed (C) = (A-B)
58.86	14.83	44.03

Initial Spares

31. Regulation 23(d) of the 2019 Tariff Regulations provides that the Initial Spares shall be capitalised as a percentage of the plant and machinery cost up to the cut-off date, subject to the following ceiling norms:

"(d) Transmission System

- (i) Transmission line- 1.00%
- (ii) Transmission sub-station
 - Green Field- 4.00%
 - Brown Field- 6.00%
- (iii) Series Compensation devices and HVDC Station- 4.00%
- (iv) Gas Insulated Sub-station (GIS)
 - Green Field- 5.00%
 - Brown Field- 7.00%
- (v) Communication System- 3.50%
- (vi) Static Synchronous Compensator- 6.00%"



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

				(₹ in lakh)
Particulars	Plant and machinery cost	Initial Spares claimed	Ceiling (in %)	Initial Spares worked out
Sub-station	3018.06	125.23	6.00	184.65

33. We have considered the Petitioner's submissions. Based on the information available on record, the Initial Spares for the transmission asset are allowed as per the respective percentage of plant and machinery cost as on the cut-off date on individual basis. The Initial Spares allowed for the transmission asset are as follows:

Particulars	Plant and Machinery cost (excluding IDC/IEDC, Land cost, and Cost of Civil Works) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2019 Tariff Regulations (in %)	Initial Spares allowable (₹ in lakh)	Initial Spares disallowed (₹ in lakh)	Initial Spares Allowed (₹ in lakh)
	Α	В	С	D=(A-B)*C/(100-C)	E=B-D	
Sub-station	3018.06	125.23	6.00	184.64	0.00	125.23

34. We observe that there are no excess Initial Spares for the transmission asset. Therefore, the Initial Spares have been allowed, as claimed by the Petitioner. The capital cost allowed on the COD is as follows:

(₹ in lakh) Capital cost **Undischarged** IDC claimed as on **IEDC Capital Cost as** IDC as on COD (Auditor's **Disallowed** on COD **Disallowed** COD **Certificate**) (E) = (A-B-C-D)(B) (D) (C) (A) 1984.00 31.40 2.68 14.83 1935.09

Additional Capital Expenditure (ACE)

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



"24. Additional Capitalisation within the original scope and up to 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.

25. Additional Capitalisation within the original scope and after the cut-off date

- (1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:
 - (a) 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;
 - (b) Change in law or compliance of any existing law:
 - (c) Deferred works relating to ash pond or ash handling system in the original scope of work;
 - (d) Liability for works executed prior to the cut-off date;
 - (e) Force Majeure events;
 - (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; Raising of ash dyke as a part of ash disposal system.
- (2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:
 - (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;



- (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
- (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission."
- 36. The ACE claimed by the Petitioner for the transmission asset is as follows:

(₹ in lakh)

Cost as per the	Capital cost	Projected ACE			Capital Cost as
FR Approved Cost	as on COD	2023-24	2024-25	2025-26	on 31.3.2024
3141.00	1984.00	563.50	563.50	0.00	3111.00

37. The Petitioner, vide affidavit dated 26.4.2024, has submitted the following package-wise and vendor-wise details of the ACE claimed, including the details of balance and retention payments:

		Year of	Outstanding	Discharge		Additional Liability Recognized (Unexecuted works)			Outstanding Liability as on	
Party Name	Particulars (TL/SS)	rs Actual Liability a	Liability as on COD	2022- 23	2023- 24	Total (19-24)	2022- 23	2023- 24	Total (19-24)	31.3.2024 (To be discharged during 2024-29)
1 M/s. Toshiba T&D System India (Pvt)	Sub-station Work	2023	316.77	0.00	0.00	0.00	0.00	552.19	552.19	316.77
Ltd (LOA- 150013 & 150014) 2 M/s. Hartek Power Pvt Ltd (200011 & 200012)	IT Equipment	2023	0.00	0.00	0.00	0.00	0.00	11.31	11.31	0.00
Total								563.50	563.50	316.77

38. We have considered the Petitioner's submissions. It has been observed that the Petitioner has also claimed the ACE for the FY 2024-25, which shall be dealt with as per the 2024 Tariff Regulations in the 2024-29 tariff period.

39. Further, the ACE claimed by the Petitioner for the FY 2023-24 has been allowed under Regulation 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations on account of the balance and retention payments for the works already executed. The actual/projected ACE allowed is subject to truing up in respect of the transmission asset, and the same is as follows:

(₹ in lakh)

Particulars	2023-24
ACE, as per the Auditor's Certificate allowed under Regulation 24(1)(a) and 24(1) (b) of the 2019 Tariff Regulations towards undischarged liabilities recognised to be payable at a future date	563.50
Add: IDC Discharged	2.68
ACE allowed in the instant order	566.18

40. The capital cost considered for the transmission asset for the 2019-24 tariff period is as under:

(₹ in lakh)

Capital cost as ACE allowed on COD 2023-24		Capital Cost as on 31.3.2024
1935.09	566.18	2501.27

Debt-Equity ratio

41. 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.
- (6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation."
- 42. The debt-equity ratio considered in respect of the transmission asset for the purpose of computation of tariff for the 2019-24 tariff period is as follows:

Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	1354.56	70.00	396.32	70.00	1750.89	70.00
Equity	580.53	30.00	169.85	30.00	750.38	30.00
Total	1935.09	100.00	566.18	100.00	2501.27	100.00



Depreciation

43. 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:

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

- (6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.
- (7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.
- (8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized asset during its useful services.
- (9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.
- (10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of
 - a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or
 - b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or
 - c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life."
- 44. The depreciation has been worked out considering the admitted capital cost as on the COD, and ACE allowed in FY 2023-24. The Weighted Average Rate of Depreciation (WAROD) has been worked as per the rates of depreciation prescribed in the 2019 Tariff Regulations, and the WAROD table is placed as an Annexure to this order. The depreciation allowed for the transmission asset is as follows:

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(₹ in lakh)

SI. No.	Particulars Particulars	2023-24
		(Pro-rata 268
		days)
Α	Opening Gross Block	1935.09
В	Addition during the year 2019-24 due to projected ACE	566.18
С	Closing Gross Block (A+B)	2501.27
D	Average Gross Block (A+C)/2	2218.18
Е	Average Gross Block (90% depreciable assets)	2212.53
F	Average Gross Block (100% depreciable assets)	5.66
G	Depreciable value (excluding IT equipment and software) (E*90%)	1991.27
Н	Depreciable value of IT equipment and software (F*100%)	5.66
	Total Depreciable Value (G+H)	1996.93
J	Weighted average rate of Depreciation (WAROD) (in %)	5.3048
K	Lapsed useful life at the beginning of the year	0
L	Balance useful life at the beginning of the year	25
М	Depreciation during the year (D*J)	86.16
N	Cumulative Depreciation at the end of the year (M+N)	86.16
0	Remaining Aggregate Depreciable Value at the end of the year (I-N)	1910.77

Interest on Loan (IoL)

- 45. 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:



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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.

- (5a) The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company 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."
- 46. The Weighted Average Rate of Interest (WAROI) on loans has been considered on the basis of the rates prevailing as on COD for the respective loans. The Petitioner has prayed that the change in the interest rate due to the floating rate of interest applicable, if any, during the 2019-24 tariff period may be adjusted. Accordingly, the floating rate of interest, if any, will be considered at the time of truing-up. The IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL allowed in respect of the transmission asset is as follows:

(₹ in lakh)

	Particulars	2023-24 (Pro-rata 268 days)
	Interest on Loan	
Α	Gross Normative Loan	1354.56
В	Cumulative Repayments up to the Previous Year	0.00
С	Net Loan-Opening (A-B)	1354.56
D	Additions	396.32
Е	Repayment during the year	86.16
F	Net Loan-Closing (C+D-E)	1664.72
G	Average Loan (C+F)/2	1509.64
Н	Weighted Average Rate of Interest on Loan (in %)	7.4836
I	Interest on Loan (G*H)	82.73

Return on Equity (RoE)

- 47. Regulations 30 and 31 of the 2019 Tariff Regulations provide as under:
 - **"30. Return on Equity**: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.



(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and 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 cutoff date beyond the original scope, excluding additional capitalization on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

Provided further that:

- i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC:
- ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues:
- iii. in case of a thermal generating station, with effect from 1.4.2020:
 - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
 - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

- (3) The return on equity in respect of additional capitalization on account of emission control system shall be computed at the base rate of one year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of operation (Ode) occurs plus 350 basis point, subject to ceiling of 14%;"
- "31. Tax on Return on Equity. (1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.



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

Rate of pre-tax return on equity = Base rate / (1-t)

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

Illustration-

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

Rate of return on equity = 15.50/(1-0.2155) = 19.758%

- (ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:
 - (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore:
 - (b) Estimated Advance Tax for the year on above is Rs 240 crore;
 - (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%:
 - (d) Rate of return on equity = 15.50/(1-0.24) = 20.395%.
- (3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered, or refunded to beneficiaries or the long-term customers, as the case may be, on year-to-year basis."
- 48. The Petitioner has submitted that the MAT rate is applicable to it. Accordingly, the MAT rate applicable in the 2019-24 tariff period has been considered for the purpose of the RoE, which shall be trued up with the actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE in respect of the transmission asset has been worked out and allowed as follows:





(₹ in lakh)

	Particulars	2023-24 (Pro-rata 268 days)
	Return on Equity	
Α	Opening Equity	580.53
В	Additions	169.85
С	Closing Equity (A+B)	750.38
D	Average Equity (A+C)/2	665.45
Ε	Return on Equity (Base Rate) (in %)	15.500
F	MAT Rate for respective year (in %)	17.472
G	Rate of Return on Equity (in %)	18.782
Н	Return on Equity (D*G)	91.52

Operation & Maintenance Expenses (O&M Expenses)

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

(₹ in lakh)

	Particulars	2023-24 (Pro-rata 268 days)
Sub-sta	tion	
i.	400 kV Sub-station	
ii.	220 kV Sub-station	
iii.	400 kV Sub-station ICT	
Sub-sta	tion: 400 kV Sub-station	
Number	of ICT bays	1
Norms (₹ lakh/bay)	36.91
Sub-sta	tion: 220 kV Sub-station	
Number	of ICT bays	1
Norms (₹ lakh/bay)	25.84
Sub-sta	tion: 400 kV Sub-station ICT	
Rating o	of ICT (in MVA)	500
Norms (₹ lakh/MVA)	0.411
Total O	&M Expenses	196.43

50. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations provides as under:

"35. Operation and Maintenance Expenses:

• • • •

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

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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					
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 (₹ Lak		0.207	0.200	0.2.2	0.202
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 subconductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942



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

Provided further that:

- the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed prorata 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 yea₹
- (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.

51. We have considered the Petitioner's submission. The O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations, and the same are as follows:

(₹ in lakh)

	(< 1111)
Particulars	2023-24 (Pro-rata 268 days)
Sub-station Bays	
400 kV Bays	1
Norms (₹ lakh/bay)	36.91
O&M Expenses Allowed (A)	27.03
220 kV Bays	1
Norms (₹ lakh/bay)	25.84
O&M Expenses Allowed (B)	18.92
400/220 kV Sub-station ICT	
Rating of 1 No. 400/220 kV ICT (in MVA)	500
Norms (₹ lakh/bay)	0.411
O&M Expenses Allowed (C)	150.48
Total O&M Expenses allowed (A+B+C)	196.43

Interest on Working Capital (IWC)

52. Regulations 34(1)(c), 34(3), 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:

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- (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.

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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.



⁽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:

- (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:-
- (7) **Bank Rate**' means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;"
- 53. 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 11.25%.
- 54. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) considered is 12.00% (SBI 1-year MCLR applicable as on 1.4.2023 of 8.50% plus 350 basis points) for the FY 2023-24. The components of the working capital and interest allowed thereon are as follows:

(₹ in lakh)

	Particulars	2023-24 (Pro-rata 268 days)
	Interest on Working Capital	
Α	Working Capital for O&M Expenses (O&M Expenses for one month)	22.35
В	Working Capital for Maintenance Spares (15% of O&M Expenses)	40.24
С	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	78.79
D	Total Working Capital (A+B+C)	141.38
Е	Rate of Interest (in %)	12.00
F	Interest on working capital (D*E)	12.42

Annual Fixed Charges (AFC) for the 2019-24 Tariff Period

55. The transmission charges allowed in respect of the transmission asset for the 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2023-24 (Pro-rata 268 days)				
Annual Transmission Charges					
Depreciation	86.16				
Interest on Loan	82.73				
Return on Equity	91.52				
O&M Expenses	196.42				
Interest on Working Capital	12.42				
Total	469.25				

Filing Fee and the Publication Expenses

- 56. The Petitioner has sought reimbursement of the fee paid by it for filing the petition and publication expenses.
- 57. We have considered the Petitioner's submissions. The Petitioner is entitled to the reimbursement of the filing fees and publication expenses in connection with the present petition directly from the beneficiaries in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

The Petitioner has sought reimbursement of the licensee fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period. The Petitioner shall be entitled to reimbursement of the 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 to recovery of RLDC fees and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

Goods and Services Tax

59. The Petitioner has submitted that if GST is levied at any rate and at any point of time in the 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

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and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ Statutory authorities, and the same may be allowed to be recovered from the beneficiaries.

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

Security Expenses

- 61. The Petitioner has submitted that security expenses in respect of the transmission asset are not claimed in the instant Petition, and it would file a separate Petition for claiming the overall security expenses and the consequential IWC as per Regulation 35(3)(c) of the 2019 Tariff Regulations.
- 62. We have considered the Petitioner's submissions. The Petitioner has claimed the consolidated security expenses on a projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission, vide order dated 3.8.2021 in Petition No. 260/MP/2020, approved the security expenses from 1.4.2019 to 31.3.2024. Therefore, the Petitioner's prayer in the instant Petition for allowing it to file a separate Petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

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

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Sharing of Transmission Charges

64. With effect from 1.11.2020, the sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 (2020 Sharing Regulations). Therefore, the sharing of the transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the billing, collection, and disbursement of the transmission charges approved in this order shall be governed by the provisions of the applicable 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

65. To summarise:

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

	(₹ in lakh)
	2023-24
AFC	(pro-rata 268 days)
	469.25

- 66. Annexure to this order form part of the order.
- 67. This order disposes of Petition No. 90/TT/2024 in terms of the above findings and discussions.

sd/- sd/- sd/(Harish Dudani) (Ramesh Babu V.) (Jishnu Barua)
Member Member Chairperson

ANNEXURE-I

2019-24 Capital Expenditure	Admitted Capital Cost as on	Projected ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2024	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)
	1.4.2019 (₹ in lakh)	2023-24	Total	(₹ in lakh)	(in %)	2023-24
Sub-station	1935.09	554.87	554.87	2489.96	5.28	116.82
IT Equipment (Incl. Software)	-	11.31	11.31	11.31	15.00	0.85
Total	1935.09	566.18	566.18	2501.27		117.67
				_	Gross Block n lakh)	2218.18
				Weighted of Deprec	5.30	

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R.M. BANSAL & CO. COST ACCOUNTANTS

A-201 Twin Towers Lakhanpur, Kanpur-208024 Mob. No. 8874341333 Mob No. 9415134328

Email: cmarmbansal11@gmail.com rishibansal.2008@rediffmail.com

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 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation under 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening, which is under commercial operation w.e.f. 08-07-2023 is detailed as under:

(Rs. In Lakhs)

S/N	Particulars	Capital Cost	IEDC	IDC	Total
1	Expenditure upto 31/03/2023	1877.12	58.86	10.46	1946.44
2	Expenditure from 01/04/2023 to 07/07/2023 (upto DOCO)	13.94	0.00	23.62	37.56
3	Expenditure from 08/07/2023 to 31/03/2024	848.42	0.00	0.00	848.42
4	Expenditure during 2024-25	3.77	0.00	0.00	3.77
5	Estimated Expenditure during 2024-25	241.33	0.00	0.00	241.33
e e	Total	2984.58	58.86	34.08	3077.52

We certify that we have verified the expenditure up to 31.03.2025 as referred above on the basis of the information drawn from the audited Statement of Accounts of Power Grid Corporation of India Ltd., Northern Region-III as on 31.03.2025.

The estimated expenditure is based on Management estimate.

For R.M. Bansal & Co

Cost Accountants

(Rishi Mohan Bansal)

Bansa

FRN 0000

Partner,

Place: Kanpur Date: 20.05.25

UDIN: 2503323ZZV70AUEQWF

R.M. BANSAL & CO. COST ACCOUNTANTS

A-201 Twin Towers Lakhanpur, Kanpur-208024 Mob. No. 8874341333 Mob No. 9415134328

Email: cmarmbansal11@gmail.com rishibansal.2008@rediffmail.com

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 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation under 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening, which is under commercial operation w.e.f. 08-07-2023 is detailed as under:

(Rs. In Lakhs)

S/N		Land (Free Hold)	Building and Civil Works	Tr. Line	Sub-Station	OPGW	Communication System excl. OPGW	I. T Equipment incl. software, UNMS, URTDSM, EMS, Cyber Security System, REMC, WAMS, SCADA System	ies	Total
1	Expenditure upto 31/03/2023	0.00	0.00	0.00	1946.44	0.00	0.00	0.00	0.00	1946.44
2	Expenditure from 01/04/2023 to 07/07/2023 (upto DOCO)	0.00	0.00	0.00	37.56	0.00	0.00	0.00	0.00	37.56
3	Expenditure from 08/07/2023 to 31/03/2024	0.00	0.00	0.00	827.68	0.00	0.00	20.74	0.00	848.42
4	Expenditure during 2024- 25	0.00	0.00	0.00	3.77	0.00	0.00	0.00	0.00	3.77
	Estimated Expenditure during 2024- 25	0.00	0.00	0.00	239.45	0.00	0.00	1.88	0.00	241.33
	Total	0.00	0.00	0.00	3054.90	0.00	0.00	22.62	0.00	3077.52



R.M. BANSAL & CO. COST ACCOUNTANTS

Place: Kanpur Date: 20.05.25

UDIN: 2503323ZZV70AUEQWF

A-201 Twin Towers Lakhanpur, Kanpur-208024 Mob. No. 8874341333 Mob No. 9415134328

Email: cmarmbansal11@gmail.com rishibansal.2008@rediffmail.com

S/N	Particulars	TL	Sub-station	PLCC
1	Total Plant & Machinery Cost (Excluding IDC, IEDC, Land Cost & Cost of civil Works for the purpose of Initial Spares)	NA	2984.58	NA
2	Initial Spares included above	NA	125.23	NA

We certify that we have verified the expenditure up to 31.03.2025 as referred above on the basis of the information drawn from the audited Statement of Accounts of Power Grid Corporation of India Ltd., Northern Region-III as on 31.03.2025.

The estimated expenditure is based on Management estimate.

For R.M. Bansal & Co Cost Accountants

12 50

(Rishi Mohan Bansal)

Partner



Liability Flow Statement

Name of Petitioner: POWERGRID Corporation of India Ltd.

Project Name: 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening

Name of the Asset: 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation

Actual DOCO: 08.07.2023

(Rs. in Lakhs)

Asset No	Party name	Particular's Year of Actual Liability as on		O		Discharge		Additiona (Un	Outstanding Liability as on 31.03.2024		
		(TL/SS) Capit	Capitlization	COD	2022-23	2023-24	Total (19-24)	2022-23	2023-24	Total (19-24)	(To be discharged during 2024-29)
A ccet_ I	1. Toshiba T&D System India (Pvt) LTd (LOA-150013 & 150014) 2. Hartek Power Pvt Ltd (200011 & 200012)	S/S Work	2023	316.77	0.00	183.83	183.83	0.00	664.59	664.59	132.94
		IT equipment's	2023	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total			316.77	0.00	183.83	183.83	0.00	664.59	664.59	132.94

Asset No	Party name	Particular's Y		Particular's Year of Actual		Vear of Actual Outstanding		Discharge			Additional Liability Reconized* (Unexecuted works)			
			Capitlization	Liability as on 31.03.2024	2024-25	2025-26	Total (24-29)	2024-25	2025-26	Total (24-29)	Liability as on 31.03.2029			
Asset-1	1. Toshiba T&D System India (Pvt) LTd (LOA-150013 & 150014) 2. Hartek Power Pvt Ltd (200011 & 200012)	S/S Work	2023	132.94	0.00	132.94	132.94	3.77	108.39	112.16	0.00			
		IT equipment's	2023	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Total			132.94	0.00	132.94	132.94	3.77	108.39	112.16	0.00			

	State	nent sho	wing IDC	Dischar	ged upto DOCO	ı				
			9 0							
Project:	1x500MVA, 40	00/220kV ICT A	ugmentation (3rd) at Soha	wal (PG) under System Strengthe	ening				
Element:	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation									
DOCO: Actual	08-Jul-23									
Loans	Amount	Interest Rate	Drawl Date	Total IDC	Annual Interest Payment Date upto DOCO	Interest Discharged upto DOCO	Annual Interest Payment Date after DOCO			
Bond LXX	1200.00	7.40%	17-Feb-23	33.92	17-May-23	21.62	17-Aug-23			
SBI-04 (2023-2024) (Q2) (04.07.2023)	180.07	Floating	04-Jul-23	0.16	01-Jul-23	0.00	01-Aug-23			
SBI-04 (2023-2024) (Q2) (11.08.2023) (IR Replacement)	8.73	Floating	11-Aug-23	0.00		0.00				
Total	1388.80			34.08		21.62				
Total IDC as per Cost Certificate	34.08									
IDC Discharged upto DOCO	21.62									
Accrual IDC upto DOCO (Discharged during 2023-2024)	12.46									
Accrual IDC upto DOCO (Discharged during 2024-2025)	0.00									

Summary of Tariff

Name of the Tr	ransmission Licensee: Power Grid Corporation	on of India Limited					
Project 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening							
Element Description	11 V600M/V Δ /00/220KV/ ICT /3rd) at /00/220KV/ Sobawal (PC) Substation						
Region	Northern Region	DOCO Date	Jul 8, 2023				

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Year Days	0.00	0.00	0.00	0.00	366.00
Tariff Days	0.00	0.00	0.00	0.00	268.00
Depreciation-Form No. 10A	0.00	0.00	0.00	0.00	92.06
Interest on Loan-Form No. 9E	0.00	0.00	0.00	0.00	88.83
Return on Equity-Form No. 8	0.00	0.00	0.00	0.00	97.45
Int. on Working capital-Form No.11	0.00	0.00	0.00	0.00	12.69
Op. and maintenance-Form No.2	0.00	0.00	0.00	0.00	196.43
Total AFC	0.00	0.00	0.00	0.00	487.46

Summary of Asset Level Cost

Name of the Transmission Licensee		Power Grid Corporation of India Limited	ower Grid Corporation of India Limited				
Project	Project 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening						
Element Description							
Region	Northern Region		DOCO Date	Jul 8, 2023			

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

	i) Appo Approve		ii) Summary of Actual / Projected Capital Expenditure incurred					urred	
Particular	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	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	2,257.22	0.00	0.00	0.00	0.00	641.17	2,898.39
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/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.74	20.74
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	2,257.22	0.00	0.00	0.00	0.00	661.91	2,919.13
Less: Liability	0.00	0.00	319.45	0.00	0.00	0.00	0.00	0.00	0.00
Add:discharge of liability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	186.51	132.94
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	1,937.77	0.00	0.00	0.00	0.00	848.42	2,786.19
Equity	942.30	0.00	581.33	0.00	0.00	0.00	0.00	254.53	835.86
Debt	2,198.70	0.00	1,356.44	0.00	0.00	0.00	0.00	593.89	1,950.33

<u>Details of Transmission Lines and Substations, Communication System covered in the project scope</u> and O&M for instant asset

Name of the Tra	Name of the Transmission Licensee Power Grid Corporation of India Limited							
Project	pject 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening							
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation							
Region	Northern Region	DOCO Date Jul 8, 2023						

1. Transmission Lines (Amount in Rs. Lakh)

Summary:

2. Sub Station

	Type of Voltage		No. of Transfor ms/	No. of		o. of Bays		MVA/MVAR Capacity			acity	Date of	Covered in the present petition	
Name of Sub-station	Substation	Level KV	Reactor/ SVC etc. (with capacity)	765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV	Comm. operation	s/	If No, Petitio n No.
Sohawal:400KV BAY FOR ICT-III AT SOHAWAL	Conventio nal	400 KV			1.000							Jul 8, 2023	Υ	
Sohawal:220KV BAY FOR ICT-III AT SOHAWAL	Conventio nal	220 KV				1.000						Jul 8, 2023	Υ	
Sohawal:400KV ICT-III AT SOHAWAL	Conventio nal	400 KV	1.000						500.00			Jul 8, 2023	Υ	

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	0.00	0.00	0.00	0.00	36.91
No. of Units	0.00	0.00	0.00	0.00	1.00
O&M Claimed	0.00	0.00	0.00	0.00	27.03
220KV SUB-STATION					
Normative Rate of O&M as per Regulation	0.00	0.00	0.00	0.00	25.84
No. of Units	0.00	0.00	0.00	0.00	1.00
O&M Claimed	0.00	0.00	0.00	0.00	18.92

Page 2 of 5 0688001 : Truing Up: 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation

400KV SUB-STATION ICT					
Normative Rate of O&M as per Regulation	0.00	0.00	0.00	0.00	0.411
No. of Units	0.00	0.00	0.00	0.00	1.00
O&M Claimed	0.00	0.00	0.00	0.00	150.48

3. Communication System

Summary:

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M					
Transmission Line	0.00	0.00	0.00	0.00	0.00
Substation	0.00	0.00	0.00	0.00	196.43
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	0.00	0.00	0.00	0.00	196.43
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	0.00	0.00	0.00	0.00	196.43

Name of the Tr	ransmission Licensee	Power Grid Corporat	ion of India Limited	3			
Project	1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening						
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation						
Region	Northern Region		DOCO Date	Jul 8, 2023			

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 subconductors)	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	0.00	2,563.00	2,653.00	2,746.00	2,842.00	2,942.00
(Rs Lakh) (3000 MW)						

Statement of Capital cost

Name of the Transmission Licensee Power Grid Corporation of India Limited				
Project	ythening			
Element Description	1x500MVA, 400/220kV	ICT (3rd) at 400/220kV Sohawal (PG) Substa	ation	
Region	Northern Region		DOCO Date	Jul 8, 2023

A) Capital Cost

(Amount in Rs. Lakh)

Particular	Accrual Basis	Un-discharged Liabilities	Cash Basis
As on relevant date :2023-24			
a) Opening Gross Block Amount as per books	2,257.22	319.45	1,937.77
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	34.08	2.68	31.40
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	58.86	0.00	58.86
a) Addition in Gross Block Amount during the period	661.91	0.00	661.91
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	2,919.13	132.94	2,786.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	34.08	0.00	34.08
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	58.86	0.00	58.86

B) Flow of liability for the Asset

2) 1 1011 01 11401111 110 110001					`	
Particular	2023-2024	2024-2025	2025-2026			

Opening balance of liability	319.45	132.94	132.94	0.00	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	0.00	0.00	0.00
Discharge of liability by payment and claimed as ACE	186.51	0.00	132.94	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
Closing Balance of Admitted liability	132.94	132.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Financial Package upto COD

Name of the Tra	ansmission Licensee	Power Grid Corporation	n of India Limited			
Project 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening						
Element Description 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation						
Region	Northern Region		DOCO Date	Jul 8, 2023		

	Financial I Appr	Package as oved	Financial I on COD 0	Package as 1/04/2019	As Admitted on COD 01/04/2019		
Particulars	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	2,198.70	INR	1,356.44		0.00	
Equity		0.00		0.00		0.00	
Foreign		0.00		0.00		0.00	
Domestic	INR	942.30	INR	581.33		0.00	
Total Equity	INR	942.30	INR	581.33		0.00	
Debt Equity Ratio					70:30		
Total Cost	INR	3,141.00	INR	1,937.77		0.00	

Particulars	Debt	Equity	Total	
Addcap for 2023 - 2024			848.42	

Particulars	Actual	Normative	
Addcap for 2023 - 2024			

Equity	254.53	
Debt	593.89	
Total	848.42	
Total Capital cost with Addcap	2,786.19	

Statement of Additional Capitalisation after COD

Name of the Transmission Licensee		Power Grid Corporat	ion of India Limited	I		
Project	1x500MVA, 400/220kV I	CT Augmentation (3rd	d) at Sohawal (PG)	Under System Strengthening		
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation					
Region	Northern Region		DOCO Date	Jul 8, 2023		

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	Grants	Asset pertaini ng to other busines s (If any)	ons dr. ards Other Dedu ct ion (if any) (5)	Less: Un- discharge d liability included in (2-4-5)	Add: Discharge of earlier admitted liability	ACE on cash basis for tariff purpose	Admitte d Cost in final tariff (Rs Lakh)
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	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 :2020-21 (Actual/Projected)									

Building & Civil Works	0.00	0.00	0.00	8	0.00	0.00	0.00	0.00	0.00
Land (Freehold Land)	0.00		0.00		0.00	0.00	0.00	0.00	0.00
ACE for the year :2022-23 (Actual/Projected)									
Total	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
Batteries	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
Land (Leasehold)	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
Substations	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
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2021-22 (Actual/Projected)									
Total	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
Batteries	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
Land (Leasehold)	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
Substations	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
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Freehold Land)	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 :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	0.00	0.00	0.00
Substations	641.17	0.00	0.00	0.00	0.00	0.00	186.51	827.68	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	20.74	0.00	0.00	0.00	0.00	0.00	0.00	20.74	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	661.91	0.00	0.00	0.00	0.00	0.00	186.51	848.42	0.00

Financing of Additional Capitalisation

Name of the Transmission Licensee Power Grid Corporation of India Limited					
Project	Project 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening				
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation				
Region	Northern Region		DOCO Date	Jul 8, 2023	

		,	Actual/Projected				Admitted			
Financial Year (Starting of COD)	2019-20	2020-21	2021-22	2022-23	2023-24	2019-20	2020-21	2021-22	2022-23	2023-24
Amount capitilized in Work/ Equipment										
Financing Details										
Total Loan	0.00	0.00	0.00	0.00	593.89					
Equity	0.00	0.00	0.00	0.00	254.53					
Total	0.00	0.00	0.00	0.00	848.42					

Calculation of ROE

Name of the Transmission Licensee Power Grid Corpor			on of India Limited		
Project 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening					
Element Description	11y500MV/A 400/220kV ICT (3rd) at 400/220kV Sonawal (PG) Substation				
Region	Northern Region		DOCO Date	Jul 8, 2023	

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the year	0.00	0.00	0.00	0.00	366.00
No. of days for which tariff claimed	0.00	0.00	0.00	0.00	268.00
Opening Normative Equity	0.00	0.00	0.00	0.00	581.33
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)	0.00	0.00	0.00	0.00	581.33
Add: Increase in Equity due to addition during the year / period	0.00	0.00	0.00	0.00	198.58
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	0.00	0.00	0.00	55.95
Closing Normative Equity	0.00	0.00	0.00	0.00	835.86
Average Normative Equity	0.00	0.00	0.00	0.00	708.60
Rate of return on Equity (%)	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	15.50
MAT/Corporate Rate	0.00	0.00	0.00	0.00	17.472
Grossed up rate of ROE	0.00	0.00	0.00	0.00	18.782
Return on Equity	0.00	0.00	0.00	0.00	133.09
Pro rata return on Equity	0.00	0.00	0.00	0.00	97.45

Calculation of WAR of interest on actual loan

Name of the Transmission Licensee Power Grid Corpor			on of India Limited		
Project 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening					
Element Description	11y500MV/A 400/220kV ICT (3rd) at 400/220kV Sonawal (PG) Substation				
Region	Northern Region		DOCO Date	Jul 8, 2023	

				(AIIIOUIII III RS. Lakii)			
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24		
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	16.39		
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	173.57		
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	17.36		
Net Loan-Closing	0.00	0.00	0.00	0.00	156.21		
Average Net Loan	0.00	0.00	0.00	0.00	78.11		
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	0.00	8.152476		
Interest on loan	0.00	0.00	0.00	0.00	6.3679		

SBI-04 -ADD CAP 2024-25					
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	0.00
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	0.00	0.00	0.00	0.00	8.152476
Interest on loan	0.00	0.00	0.00	0.00	0.00

SBI-04 -ADD CAP ACCRUAL IDC					
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	0.82
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	8.73
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.87
Net Loan-Closing	0.00	0.00	0.00	0.00	7.86
Average Net Loan	0.00	0.00	0.00	0.00	3.93
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	0.00	8.152476
Interest on loan	0.00	0.00	0.00	0.00	0.3204

SBI-04 -DOCO LOAN					
Gross Loan- Opening	0.00	0.00	0.00	0.00	180.07
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	17.00
Net loan-Opening	0.00	0.00	0.00	0.00	163.07
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	0.00	0.00	0.00	18.01
Net Loan-Closing	0.00	0.00	0.00	0.00	145.06
Average Net Loan	0.00	0.00	0.00	0.00	154.07
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	0.00	8.152476
Interest on loan	0.00	0.00	0.00	0.00	12.5605

Canara-01 -ADD CAP 2024-25					
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	0.00
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	0.00	0.00	0.00	0.00	8.15
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND LXX (70) -DOCO LOAN					
Gross Loan- Opening	0.00	0.00	0.00	0.00	1,200.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	30.00
Net loan-Opening	0.00	0.00	0.00	0.00	1,170.00
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	90.00
Net Loan-Closing	0.00	0.00	0.00	0.00	1,080.00
Average Net Loan	0.00	0.00	0.00	0.00	1,125.00
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	0.00	7.40
Interest on loan	0.00	0.00	0.00	0.00	83.25

Bond LXXIV (74) -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	0.00
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	29.48
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	29.48
Average Net Loan	0.00	0.00	0.00	0.00	14.74
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	0.00	7.70
Interest on loan	0.00	0.00	0.00	0.00	1.135

Bond LXXV (75) -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	0.00
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	390.84
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	390.84
Average Net Loan	0.00	0.00	0.00	0.00	195.42
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	0.00	7.65
Interest on loan	0.00	0.00	0.00	0.00	14.9496

Summary

Gross Loan- Opening	0.00	0.00	0.00	0.00	1,380.07
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	64.21
Net loan-Opening	0.00	0.00	0.00	0.00	1,333.07
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	602.62
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	126.24
Net Loan-Closing	0.00	0.00	0.00	0.00	1,809.45

Average Net Loan	0.00	0.00	0.00	0.00	1,571.27
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	0.00	7.547
Interest on loan	0.00	0.00	0.00	0.00	118.5834

Calculation of interest on Normative loan

Name of the Transmission Licensee		Power Grid Corporation of India Limited				
Project	oject 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening					
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation					
Region	Northern Region		DOCO Date	Jul 8, 2023		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the Year	0.00	0.00	0.00	0.00	366.00
No. of days for which Tariff claimed	0.00	0.00	0.00	0.00	268.00
Gross normative loan-Opening	0.00	0.00	0.00	0.00	1,356.44
Cumulative repayments of Normative loan upto previous year	0.00	0.00	0.00	0.00	0.00
Net normative loan-Opening	0.00	0.00	0.00	0.00	1,356.44
Addition in normative loan towards the ACE	0.00	0.00	0.00	0.00	593.89
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	0.00	0.00	0.00	0.00	92.06
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	0.00	0.00	0.00	0.00	1,858.27
Average normative loan	0.00	0.00	0.00	0.00	1,607.36
Weighted Average Rate of interest on actual loan	0.00	0.00	0.00	0.00	7.547
Interest on normative loan	0.00	0.00	0.00	0.00	121.31
Pro rata interest on normative loan	0.00	0.00	0.00	0.00	88.83

Calculation of Depreciation Rate on Original Project Cost

Name of the Transmission Licensee		Power Grid Corpora	tion of India Limited	d		
Project	1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening					
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation					
Region	Northern Region		DOCO Date	Jul 8, 2023		

(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
2023-24						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	1,937.77	827.68	2,765.45	2,351.61	5.28	90.92
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	6.33	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	20.74	20.74	10.37	15.00	1.14
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	1,937.77	848.42	2,786.19	2,361.98	0.00	92.06
Weighted Average Rate of Depreciation(%)					3.897577	

Statement of Depreciation

Name of the Tra	ansmission Licensee	Power Grid Corporation	on of India Limited			
Project	roject 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening					
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation					
Region	Northern Region		DOCO Date	Jul 8, 2023		

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	0.00	0.00	0.00	0.00	366.00
No of days for which tariff claimed	0.00	0.00	0.00	0.00	268.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/ Project	0.00	0.00	0.00	0.00	25.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	0.00	0.00	0.00	0.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	0.00	0.00	0.00	25.00
Capital Base					
1.4 Opening capital cost	0.00	0.00	0.00	0.00	1,937.77
1.5 Additional Capital Expenditure dr. the year	0.00	0.00	0.00	0.00	848.42
1.6 De-Capitalisation During the year	0.00	0.00	0.00	0.00	0.00
1.7 Closing capital cost	0.00	0.00	0.00	0.00	2,786.19
1.8 Average capital cost	0.00	0.00	0.00	0.00	2,361.98
1.9 Freehold land included in 1.8	0.00	0.00	0.00	0.00	0.00
1.10 Asset having NIL salvage value included in 1.8	0.00	0.00	0.00	0.00	10.37
1.11 Asset having 10% salvage value included in 1.8	0.00	0.00	0.00	0.00	2,351.61
1.12 Depreciable Value(1.10+90% of 1.11)	0.00	0.00	0.00	0.00	2,126.82
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	0.00	0.00	0.00	0.00	3.897577

1.14 Depreciation(for the period)	0.00	0.00	0.00	0.00	92.06
1.15 Depreciation(Annualised)	0.00	0.00	0.00	0.00	92.06
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	92.06

Calculation of interest on working Capital

Name of the Transmission Licensee		Power Grid Corpora	tion of India Limite	d		
Project	t 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening					
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation					
Region	Northern Region		DOCO Date	Jul 8, 2023		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	0.00	0.00	0.00	0.00	366.00
No of days for which tariff claimed	0.00	0.00	0.00	0.00	268.00
O&M Expenses-one month	0.00	0.00	0.00	0.00	22.35
Maintenance spares 15% of O&M Expenses	0.00	0.00	0.00	0.00	40.24
Receivables equivalent to 45 days of AFC	0.00	0.00	0.00	0.00	81.85
Total Working capital	0.00	0.00	0.00	0.00	144.44
Bank Rate as on 01.04.2019 or as on 01st April of the COD year, whichever is later.	0.00	0.00	0.00	0.00	12.00
Interest on working capital	0.00	0.00	0.00	0.00	17.33
Pro rata interest on working capital	0.00	0.00	0.00	0.00	12.69

Drawdown schedule Calculation of IDC & Financing Charges

Name of the Transmission Licensee Power Grid Corporation of India Limited						
Project	Project 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening					
Element Description						
Region	Northern Region DOCO Date Jul 8, 2023					

		Quarter 1		Quarter 2			Quarter n (COD)		
Particulars	Quantum in FC	Ex. Rate on Drawn Down Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Down Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Down Date	Amount in Indian Rupee
Loans									
Foreign Loans									
Total of Foreign Loans									
Indian Loans									
SBI-04 -DOCO LOAN									
Draw Down Account									180.07
IDC									
Financing Charges									
BOND LXX (70) -DOCO LOAN			400						
	•	•	Page 92 f 2	2	•			•	

Draw Down Account					1,200.00
IDC					
Financing Charges					
Total of Indian Loans					1,380.07
Total of Loan Drawn					1,380.07

Summary of Tariff

No. - 1 Encl-6

Name of the Transmission Licensee:		Power Grid Corporation	n of India Limited			
Project	1x500MVA, 400/220kV	ICT Augmentation (3rd	d) at Sohawal (PG)	Under System Strengthening		
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation					
Region	Northern Region		DOCO Date	Jul 8, 2023		

(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	149.23	155.79	162.25	162.25	162.25
Interest on Loan-Form No. 9E	135.47	130.39	124.70	112.35	100.00
Return on Equity-Form No. 8	157.10	164.00	170.80	170.80	170.80
Int. on Working capital-Form No.11	14.38	14.92	15.46	15.69	16.04
Op. and maintenance-Form No.2	181.20	190.83	200.61	211.03	222.59
Total AFC	637.38	655.93	673.82	672.12	671.68

Summary of Asset Level Cost

Name of the Transmission Licensee Power Grid Corporation of India Limited					
Project	1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening				
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation				
Region	Northern Region		DOCO Date	Jul 8, 2023	

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

	i) Appo Approve		i	ii) Summary	of Actual /	Projected C	apital Expe	nditure inc	urred
Particular	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	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	2,898.39	3.77	106.51	0.00	0.00	0.00	3,008.67
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/	0.00	0.00	20.74	0.00	1.88	0.00	0.00	0.00	22.62
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	2,919.13	3.77	108.39	0.00	0.00	0.00	3,031.29
Less: Liability	0.00	0.00	132.94	0.00	0.00	0.00	0.00	0.00	0.00
Add:discharge of liability	0.00	0.00	0.00	0.00	132.94	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	2,786.19	3.77	241.33	0.00	0.00	0.00	3,031.29
Equity	942.30	0.00	835.86	1.13	72.40	0.00	0.00	0.00	909.39
Debt	2,198.70	0.00	1,950.33	2.64	168.93	0.00	0.00	0.00	2,121.90

<u>Details of Transmission Lines and Substations, Communication System covered in the project scope</u> and O&M for instant asset

Name of the Tr	Name of the Transmission Licensee Power Grid Corporation of India Limited						
Project	Project 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening						
Element Description	n 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation						
Region	Northern Region DOCO Date Jul 8, 2023						

1. Transmission Lines (Amount in Rs. Lakh)

Summary:

2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transfor ms/ Reactor/ SVC etc. (with capacity)	No. of Bays			MVA/MVAR Capacity				Date of	Covered in the present petition		
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV	Comm. operation	s/	If No, Petitio n No.
Sohawal:400KV BAY FOR ICT-III AT SOHAWAL	Conventio nal	400 KV			1.000							Jul 8, 2023	Υ	
Sohawal:220KV BAY FOR ICT-III AT SOHAWAL	Conventio nal	220 KV				1.000						Jul 8, 2023	Υ	
Sohawal:400KV ICT-III AT SOHAWAL	Conventio nal	400 KV	1.000						500.00			Jul 8, 2023	Υ	

Summary:

O&M Expenses For Substations Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
400KV SUB-STATION		•			
Normative Rate of O&M as per Regulation	29.53	31.08	32.71	34.43	36.23
No. of Units	1.00	1.00	1.00	1.00	1.00
O&M Claimed	29.53	31.08	32.71	34.43	36.23
220KV SUB-STATION					
Normative Rate of O&M as per Regulation	20.67	21.75	22.90	24.10	25.36
No. of Units	1.00	1.00	1.00	1.00	1.00
O&M Claimed	20.67	21.75	22.90	24.10	25.36
Page	26f 5 0688001:	1x500MVA, 400/220kV ICT (3	rd) at 400/220kV Sohawal (Po	G) Substation	

400KV SUB-STATION ICT					
Normative Rate of O&M as per Regulation	0.262	0.276	0.29	0.305	0.322
No. of Units	1.00	1.00	1.00	1.00	1.00
O&M Claimed	131.00	138.00	145.00	152.50	161.00

3. Communication System

Summary:

Summary of O&M Expenses claim

Particular	2024-25	2025-26	2026-27	2027-28	2028-29
A) Normative O&M					
Transmission Line	0.00	0.00	0.00	0.00	0.00
Substation	181.20	190.83	200.61	211.03	222.59
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	181.20	190.83	200.61	211.03	222.59
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	181.20	190.83	200.61	211.03	222.59

Name of the Tr	ransmission Licensee F	ower Grid Corporation of India Limited					
Project	1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening						
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation						
Region	Northern Region	DOCO Date Jul 8, 2023					

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 subconductors)	0.867	0.738	0.776	0.817	0.86	0.905
Single Circuit (Twin & Triple Conductor)	0.578	0.492	0.518	0.545	0.573	0.603
Single Circuit (Single Conductor)	0.289	0.246	0.259	0.272	0.287	0.302
Double Circuit (Bundled conductor with four or more sub-conductors)	1.517	1.291	1.359	1.43	1.506	1.585
Double Circuit (Twin & Triple Conductor)	1.011	0.861	0.906	0.953	1.003	1.056
Double Circuit (Single Conductor)	0.433	0.369	0.388	0.409	0.43	0.453
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.662	2.266	2.385	2.51	2.642	2.781
Multi Circuit (Twin & Triple Conductor)	1.773	1.509	1.588	1.671	1.759	1.851
Norms for HVDC stations (Rs Lakh/MW)						
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

Statement of Capital cost

Name of the Transmission Licensee		Power Grid Corporation of India Limited				
Project	ect 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening					
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation					
Region	Northern Region		DOCO Date	Jul 8, 2023		

A) Capital Cost

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

(Amount in Rs. Lakh)

132.94

0.00

2,789.96

34.08

(Amount in No. Lar	nt in Rs. Lakn)		
Un-discharged Liabilities	Cash Basis		
.13 132.94	2,786.19		
.08 0.00	34.08		
.86 0.00	58.86		
•			
.77 0.00	3.77		
.00 0.00	0.00		
.00 0.00	0.00		
.00 0.00	0.00		
-			
.90 132.94	2,789.96		
.08 0.00	34.08		
.86 0.00	58.86		
,922 34	0.00 0.00 ,922.90 132.94 34.08 0.00 58.86 0.00		
. (0.00		

2,922.90

34.08

c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	58.86	0.00	58.86
a) Addition in Cross Plack Amount during the period	108.39	0.00	108.39
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	3,031.29	0.00	3,031.29
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	34.08	0.00	34.08
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	58.86	0.00	58.86
As on relevant date :2026-27			
a) Opening Gross Block Amount as per books	3,031.29	0.00	3,031.29
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	34.08	0.00	34.08
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	58.86	0.00	58.86
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	3,031.29	0.00	3,031.29
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	34.08	0.00	34.08
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	58.86	0.00	58.86
As on relevant date :2027-28			
a) Opening Gross Block Amount as per books	3,031.29	0.00	3,031.29
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	34.08	0.00	34.08
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	58.86	0.00	58.86

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	3,031.29	0.00	3,031.29
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	34.08	0.00	34.08
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	58.86	0.00	58.86
As on relevant date :2028-29			
a) Opening Gross Block Amount as per books	3,031.29	0.00	3,031.29
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	34.08	0.00	34.08
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	58.86	0.00	58.86
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	3,031.29	0.00	3,031.29
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	34.08	0.00	34.08
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	58.86	0.00	58.86

B) Flow of liability for the Asset

(Amount in Rs. Lakh)

Particular	2024-2025	2025-2026							
Opening balance of liability	132.94	132.94	0.00	0.00	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	0.00	0.00	0.00

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0688001 : 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation

Discharge of liability by payment and claimed as ACE	0.00	132.94	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
Closing Balance of Admitted liability	132.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Financial Package upto COD

Name of the Tra	ansmission Licensee	Power Grid Corporation	on of India Limited				
Project	1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening						
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation						
Region	Northern Region		DOCO Date	Jul 8, 2023			

	Financial Appr	Package as oved	Financial I on COD 0	Package as 1/04/2024	As Admitted on COD 01/04/2024		
Particulars Particulars Particulars	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	2,198.70	INR	1,950.33		0.00	
Equity		0.00		0.00		0.00	
Foreign		0.00		0.00		0.00	
Domestic	INR	942.30	INR	835.86		0.00	
Total Equity	INR	942.30	INR	835.86		0.00	
Debt Equity Ratio					70:30		
Total Cost	INR	3,141.00	INR	2,786.19		0.00	

Particulars	Debt	Equity	Total
Addcap for 2024 - 2025			3.77
Addcap for 2025 - 2026			241.33
Addcap for 2026 - 2027			0.00
Addcap for 2027 - 2028		117	0.00

Addcap for 2028 - 2029			0.00	
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Particulars	Actual	Normative	
Addcap for 2024 - 2025			
Equity		1.13	
Debt		2.64	
Total		3.77	
Addcap for 2025 - 2026			
Equity		72.40	
Debt		168.93	
Total		241.33	
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		3,031.29	

Statement of Additional Capitalisation after COD

Name of the Transmission Licensee		Power Grid Corporat	Power Grid Corporation of India Limited				
Project	1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening						
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation						
Region	Northern Region		DOCO Date	Jul 8, 2023			

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	towards		of basis Un- arge admitted purpose bility liability ded basis		Admitte d Cost in final tariff (Rs Lakh)		
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	0.00	0.00	0.00
Substations	3.77	0.00	0.00	0.00	0.00	0.00	0.00	3.77	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	3.77	0.00	0.00	0.00	0.00	0.00	0.00	3.77	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	106.51	0.00	0.00	0.00	0.00	0.00	132.94	239.45	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	1.88	0.00	0.00	0.00	0.00	0.00	0.00	1.88	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	108.39	0.00	0.00	0.00	0.00	0.00	132.94	241.33	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 1	20 0.00	0.00	0.00	0.00	0.00	0.00
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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

Financing of Additional Capitalisation

Name of the Transmission Licensee		Power Grid Corporation of India Limited				
Project	1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening					
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation					
Region	Northern Region		DOCO Date	Jul 8, 2023		

	Actual/Projected					Admitted				
Financial Year (Starting of COD)	2024-25	2025-26	2026-27	2027-28	2028-29	2024-25	2025-26	2026-27	2027-28	2028-29
Amount capitilized in Work/ Equipment										
Financing Details										
Total Loan	2.64	168.93	0.00	0.00	0.00					
Equity	1.13	72.40	0.00	0.00	0.00					
Total	3.77	241.33	0.00	0.00	0.00					

Calculation of ROE

Name of the Transmission Licensee		Power Grid Corporation	Power Grid Corporation of India Limited				
Project	Project 1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening						
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation						
Region	Northern Region		DOCO Date	Jul 8, 2023			

(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	835.86	836.99	909.39	909.39	909.39
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)	835.86	836.99	909.39	909.39	909.39
Add: Increase in Equity due to addition during the year / period	1.13	32.52	0.00	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	39.88	0.00	0.00	0.00
Closing Normative Equity	836.99	909.39	909.39	909.39	909.39
Average Normative Equity	836.43	873.19	909.39	909.39	909.39
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	157.10	164.00	170.80	170.80	170.80
Pro rata return on Equity	157.10	164.00	170.80	170.80	170.80

Calculation of WAR of interest on actual loan

Name of the Transmission Licensee		Power Grid Corporation	Power Grid Corporation of India Limited				
Project	1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening						
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation						
Region	Northern Region		DOCO Date	Jul 8, 2023			

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Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
SBI-04 -ADD CAP 2023-24					
Gross Loan- Opening	173.57	173.57	173.57	173.57	173.57
Cumulative repayments of Loans upto previous year	33.74	51.10	68.46	85.81	103.17
Net loan-Opening	139.83	122.47	105.11	87.76	70.40
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	17.36	17.36	17.36	17.36	17.36
Net Loan-Closing	122.47	105.11	87.75	70.40	53.04
Average Net Loan	131.15	113.79	96.43	79.08	61.72
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	10.7543	9.3308	7.9073	6.4846	5.061

SBI-04 -ADD CAP 2024-25					
Gross Loan- Opening	0.00	1.83	1.83	1.83	1.83
Cumulative repayments of Loans upto previous year	0.36	0.54	0.72	0.90	1.09
Net loan-Opening	0.00	1.29	1.11	0.93	0.74
Add: Drawl(s) during the year	1.83	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.18	0.18	0.18	0.18	0.18
Net Loan-Closing	1.65	1.11	0.93	0.75	0.56

Average Net Loan	0.83	1.20	1.02	0.84	0.65
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.0681	0.0984	0.0836	0.0689	0.0533

SBI-04 -ADD CAP ACCRUAL IDC					
Gross Loan- Opening	8.73	8.73	8.73	8.73	8.73
Cumulative repayments of Loans upto previous year	1.70	2.57	3.44	4.32	5.19
Net loan-Opening	7.03	6.16	5.29	4.41	3.54
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.87	0.87	0.87	0.87	0.87
Net Loan-Closing	6.16	5.29	4.42	3.54	2.67
Average Net Loan	6.60	5.73	4.86	3.98	3.11
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.5412	0.4699	0.3985	0.3264	0.255

SBI-04 -DOCO LOAN					
Gross Loan- Opening	180.07	180.07	180.07	180.07	180.07
Cumulative repayments of Loans upto previous year	35.01	53.01	71.02	89.03	107.03
Net loan-Opening	145.06	127.06	109.05	91.04	73.04
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	18.01	18.01	18.01	18.01	18.01
Net Loan-Closing	127.05	109.05	91.04	73.03	55.03
Average Net Loan	136.06	118.06	100.05	82.04	64.04
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	11.1569	9.6809	8.2041	6.7273	5.2513

Canara-01 -ADD CAP 2024-25					
Gross Loan- Opening	0.00	0.81	0.81	0.81	0.81
Cumulative repayments of Loans upto previous year	0.08	0.12	0.20	0.28	0.36
Net loan-Opening	0.00	0.69	0.61	0.53	0.45
Add: Drawl(s) during the year	0.81	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.04	0.08	0.08	0.08	0.08
Net Loan-Closing	0.77	0.61	0.53	0.45	0.37
Average Net Loan	0.39	0.65	0.57	0.49	0.41
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	0.0318	0.053	0.0465	0.0399	0.0334

BOND LXX (70) -DOCO LOAN					
Gross Loan- Opening	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00
Cumulative repayments of Loans upto previous year	120.00	240.00	360.00	480.00	600.00
Net loan-Opening	1,080.00	960.00	840.00	720.00	600.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	120.00	120.00	120.00	120.00	120.00
Net Loan-Closing	960.00	840.00	720.00	600.00	480.00
Average Net Loan	1,020.00	900.00	780.00	660.00	540.00
Rate of Interest on Loan on Annual Basis	7.40	7.40	7.40	7.40	7.40
Interest on loan	75.48	66.60	57.72	48.84	39.96

Bond LXXIV (74) -ADD CAP 2023-24					
Gross Loan- Opening	29.48	29.48	29.48	29.48	29.48
Cumulative repayments of Loans upto previous year	0.00	2.95	5.90	8.84	11.79
Net loan-Opening	29.48	26.53	23.58	20.64	17.69

Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	2.95	2.95	2.95	2.95	2.95
Net Loan-Closing	26.53	23.58	20.63	17.69	14.74
Average Net Loan	28.01	25.06	22.11	19.17	16.22
Rate of Interest on Loan on Annual Basis	7.70	7.70	7.70	7.70	7.70
Interest on loan	2.1568	1.9296	1.7025	1.4761	1.2489

Bond LXXV (75) -ADD CAP 2023-24					
Gross Loan- Opening	390.84	390.84	390.84	390.84	390.84
Cumulative repayments of Loans upto previous year	0.00	39.08	78.17	117.25	156.34
Net loan-Opening	390.84	351.76	312.67	273.59	234.50
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	39.08	39.08	39.08	39.08	39.08
Net Loan-Closing	351.76	312.68	273.59	234.51	195.42
Average Net Loan	371.30	332.22	293.13	254.05	214.96
Rate of Interest on Loan on Annual Basis	7.65	7.65	7.65	7.65	7.65
Interest on loan	28.4045	25.4148	22.4244	19.4348	16.4444

Summary

Gross Loan- Opening	1,982.69	1,985.33	1,985.33	1,985.33	1,985.33
Cumulative repayments of Loans upto previous year	190.89	389.37	587.91	786.43	984.97
Net loan-Opening	1,792.24	1,595.96	1,397.42	1,198.90	1,000.36
Add: Drawl(s) during the year	2.64	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	198.49	198.53	198.53	198.53	198.53
Net Loan-Closing	1,596.39	1,397.43	1,198.89	1,000.37	801.83

Average Net Loan	1,694.34	1,496.71	1,298.17	1,099.65	901.11
Rate of Interest on Loan on Annual Basis	7.5896	7.5885	7.5866	7.584	7.5804
Interest on loan	128.5936	113.5774	98.4869	83.398	68.3073

Calculation of interest on Normative loan

Name of the Tr	ransmission Licensee	Power Grid Corporati	on of India Limited	
Project 1x500MVA, 400/220kV ICT Augmentation (3			d) at Sohawal (PG)	Under System Strengthening
Element Description 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation				bstation
Region	on Northern Region			Jul 8, 2023

(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	1,950.33	1,952.97	2,121.90	2,121.90	2,121.90
Cumulative repayments of Normative loan upto previous year	92.06	241.29	397.08	559.33	721.58
Net normative loan-Opening	1,858.27	1,711.68	1,724.82	1,562.57	1,400.32
Addition in normative loan towards the ACE	2.64	168.93	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	149.23	155.79	162.25	162.25	162.25
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	1,711.68	1,724.82	1,562.57	1,400.32	1,238.07
Average normative loan	1,784.98	1,718.25	1,643.70	1,481.45	1,319.20
Weighted Average Rate of interest on actual loan	7.5896	7.5885	7.5866	7.584	7.5804
Interest on normative loan	135.47	130.39	124.70	112.35	100.00
Pro rata interest on normative loan	135.47	130.39	124.70	112.35	100.00

Calculation of Depreciation Rate on Original Project Cost

Name of the Transmission Licensee Po		Power Grid Corpora	tion of India Limited	d
Project 1x500MVA, 400/220kV ICT Augmentation (3			d) at Sohawal (PG)	Under System Strengthening
Element Description	12500M/A 700/220k/ ICT (3rd) at 700/220k/ Sohawal (PC) Substation			
Region	Northern Region		DOCO Date	Jul 8, 2023

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2029
2024-25						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	2,765.45	3.77	2,769.22	2,767.34	5.28	146.12
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	20.74	0.00	20.74	20.74	15.00	3.11
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	2,786.19	3.77	2,789.96	2,788.08	0.00	149.23
Weighted Average Rate of Depreciation(%)					5.352429	

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

Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	2,769.22	239.45	3,008.67	2,888.95	5.28	152.54
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	20.74	1.88	22.62	21.68	15.00	3.25
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	2,789.96	241.33	3,031.29	2,910.63	0.00	155.79
Weighted Average Rate of Depreciation(%)					5.352449	

2026-27						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	3,008.67	0.00	3,008.67	3,008.67	5.28	158.86
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	22.62	0.00	22.62	22.62	15.00	3.39
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	3,031.29	0.00	3,031.29	3,031.29	0.00	162.25
Weighted Average Rate of Depreciation(%)					5.352507	

2027-28						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	3,008.67	0.00	3,008.67	3,008.67	5.28	158.86
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	22.62	0.00	22.62	22.62	15.00	3.39
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	3,031.29	0.00	3,031.29	3,031.29	0.00	162.25
Weighted Average Rate of Depreciation(%)					5.352507	

2028-29						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	3,008.67	0.00	3,008.67	3,008.67	5.28	158.86
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	22.62	0.00	22.62	22.62	15.00	3.39
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	3,031.29	0.00	3,031.29	3,031.29	0.00	162.25
	P	age 3 of 4			d) at 400/220kV Sohawal (PG) Substati	

Weighted Average Rate of			5.352507	
Depreciation(%)			5.352507	

Statement of Depreciation

Name of the Tra	ansmission Licensee	Power Grid Corporation	on of India Limited	
Project 1x500MVA, 400/220kV ICT Augmentation (3rd) at Soh			d) at Sohawal (PG)	Under System Strengthening
Element Description 1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawa			/ Sohawal (PG) Su	bstation
Region	Northern Region		DOCO Date	Jul 8, 2023

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	25.00	25.00	25.00	25.00	25.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	1.00	2.00	3.00	4.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	25.00	24.00	23.00	22.00	21.00
Capital Base					
1.4 Opening capital cost	2,786.19	2,789.96	3,031.29	3,031.29	3,031.29
1.5 Additional Capital Expenditure dr. the year	3.77	241.33	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	2,789.96	3,031.29	3,031.29	3,031.29	3,031.29
1.8 Average capital cost	2,788.08	2,910.63	3,031.29	3,031.29	3,031.29
1.9 Freehold land included in 1.8	0.00	0.00	0.00	0.00	0.00
1.10 Asset having NIL salvage value included in 1.8	20.74	21.68	22.62	22.62	22.62
1.11 Asset having 10% salvage value included in 1.8	2,767.34	2,888.95	3,008.67	3,008.67	3,008.67
1.12 Depreciable Value(1.10+90% of 1.11)	2,511.35	2,621.74	2,730.42	2,730.42	2,730.42
Depreciation for the period and Cum. Depreciation			,	,	
1.13 Weighted Average Rate of depreciation	5.352429	5.352449	5.352507	5.352507	5.352507

1.14 Depreciation(for the period)	149.23	155.79	162.25	162.25	162.25
1.15 Depreciation(Annualised)	149.23	155.79	162.25	162.25	162.25
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	92.06	241.29	397.08	559.33	721.58
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	241.29	397.08	559.33	721.58	883.83

Calculation of interest on working Capital

Name of the Transmission Licensee		Power Grid Corporation of India Limited				
Project	1x500MVA, 400/220kV IC	CT Augmentation (3rd	d) at Sohawal (PG)	Under System Strengthening		
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation					
Region	Northern Region		DOCO Date	Jul 8, 2023		

(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	15.10	15.90	16.72	17.59	18.55
Maintenance spares 15% of O&M Expenses	27.18	28.62	30.09	31.65	33.39
Receivables equivalent to 45 days of AFC	78.58	80.87	83.07	82.64	82.81
Total Working capital	120.86	125.39	129.88	131.88	134.75
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	14.38	14.92	15.46	15.69	16.04
Pro rata interest on working capital	14.38	14.92	15.46	15.69	16.04

Drawdown schedule Calculation of IDC & Financing Charges

Name of the Tr	ansmission Licensee Power Grid Corporation of India Limited					
Project	1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) Under System Strengthening					
Element Description	1x500MVA, 400/220kV ICT (3rd) at 400/220kV Sohawal (PG) Substation					
Region	Northern Region	DOCO Date Jul 8, 2023				

(Amount in Rs. Lakh)

	Quarter 1			Quarter 2			Quarter n (COD)		
Particulars	Quantum in FC	Ex. Rate on Drawn Down Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Down Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Down Date	Amount in Indian Rupee
Loans									
Foreign Loans									
Total of Foreign Loans									
Indian Loans									
SBI-04 -DOCO LOAN									
Draw Down Account									180.07
IDC									
Financing Charges									
BOND LXX (70) -DOCO LOAN			407						
		1	Page 376 2		1			1	

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Draw Down Account					1,200.00
IDC					
Financing Charges					
Total of Indian Loans					1,380.07
Total of Loan Drawn					1,380.07

Summary of issue involved	in the petition	PART-III FORM- 15				
1. Name of the Petitioner	Powergr	id Corporation of India Ltd				
2. Petition Category	Transmis	ssion				
3. Tariff Period	2024-29					
4. Name of the Project		1x500MVA, 400/220kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening				
5. Investment Approval date	07.02.20)22				
6. SCOD of the Project	28.02.20	023				
7. Actual COD of the project	08.07.20)23				
8. Whether entire scope is covered in the present	t petition. Yes					
9. No. of Assets covered in instant petition	1					
10. No. of Assets having time over run	N A					
11. Estimated Project Cost as per IA	Rs. 3141	1.00 Lakhs				
12. Is there any REC? if so, provide the date	NO					
13. Revised Estimated Project Cost	N A					
14. Completion cost for all the assets covered in	the instant petition. Rs. 3031	1.29 Lakhs				
15. No. of Assets covered in instant petition and	having cost overrun. NIL					
16 Prayer in brief						
17 Key details and any Specific issue invo	olved:					
18 Respondents						
Name of Respondents						
1 AJMER VIDYUT VITRAN NIGAM L	TD 9	CHANDIGARH ELECTRICITY DEPTT				
2 JAIPUR VIDYUT VITRAN NIGAM	LTD 10	UTTARAKHAND POWER CORPORATION LTD				
3 JODHPUR VIDYUT VITRAN NIGAL	M LTD 11	NORTH CENTRAL RAILWAY				
4 HIMACHAL PRADESH STATE ELEC	TRICITY BOARD 12	NEW DELHI MUNICIPAL COUNCIL				
5 PUNJAB STATE POWER CORPORAT	TION LIMITED 13	BSES YAMUNA POWER Ltd				
6 HARYANA POWER PURCHASE CEN	TRE 14	BSES RAJDHANI POWER Ltd				
7 JAMMU KASHMIR POWER CORPOR	AATION LIMITED 15	TATA POWER DELHI DISTRIBUTION LTD				
8 UTTAR PRADESH POWER CORPOR.	ATION LTD.					
		(Petitioner)				

			Summary of	Capital Cost & Annu	al Fixed Cos	st (AFC) Clain	ned for ALL	the assets co	vered in the p	present petiti	on.		
Name of	the Petitioner				Powergrid Co	orporation of Indi	a Ltd						
Tariff Per	iod				2024-29	2024-29							
Name of t	the Transmission	Project			"1x500MVA	, 400/220kV ICT	Augmentation	(3rd) at Sohawa	ıl (PG) under Sy	stem Strengthen	ing"		
COD of the	he Project (if entire	e scope of pro	oject is compl	eted)	08.07.2023								
					•								Rupees in lakh
A) Summ	ary of Capital Cos	st as on COD	and Additio	nal Capital Expenditu			ets Covered i	in the instant	t petition.				
				i) Apportioned App	proved Cost								
		COD	Cut-off					ii) Sum	mary of Actu	al / Projected	Capital Cos	st	
S. No.	Asset No.		Date	As per Investment approval	As per RCE	As on COD/ 31.03.2024	2024-25	2025-26	2026-27	2027-28	2028-29	Capital Cost as on 31.03.2029	Completion Cost
		1	2	3	4	5	6	7	8	9	10	11=(5+6+7+8+ 9+10)	12
1	Asset-1	08.07.2023	07.07.2026	3141.00	N A	2786.19	3.77	241.33	0.00	0.00	0.00	3031.29	3031.29
	Total Capital C	Cost Claimed	[3141.00	N A	2786.19	3.77	241.33	0.00	0.00	0.00	3031.29	3031.29
B) Summ	ary of Annual Fixe	ed Cost (AFC	c) claimed for	all the assets covered	in the insta	nt petition.		•	•	•	•	•	
S. No.	Asset No.			Asset Name	and its loca	ntion			2024-25	2025-26	2026-27	2027-28	2028-29
1	Asset-1	1x500MVA,	400/220kV ICT	(3rd) at 400/220kV Sohawa	al (PG) Substat	tion			637.38	655.93	673.82	672.12	671.68
		L	Tota	al AFC for all the Asse	ts				637.38	655.93	673.82	672.12	671.68
Note: 1) T	he purpose of this	form is to su	ımmarise the	Capital cost & AFC cla	imed for all	the assets cov	ered in the i	nstant petitio	n.	•	•		

PART-III

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

Form No.	Title of Tariff Filing Forms (Transmission& Communication System)	Tick
FORM- 1	Summary of Tariff	✓
FORM- 1A	Summary of Asset level cost	NA
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.	NA
FORM- 4A	Statement of Capital cost	✓
FORM- 4B	Statement of Capital Works in Progress	NA
FORM- 4C	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New Project/Element	NA
FORM-5	Element wise Break-up of Project/Asset/Element Cost for Transmission System or Communication System	NA
FORM-5A	Break-up of Construction/Supply/Service packages	NA
FORM-5B	Details of all the assets covered in the project	NA
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.	NA
FORM- 8	Calculation of Return on Equity	✓
FORM-8A	Details of Foreign Equity	NA
FORM-9	Details of Allocation of corporate loans to various transmission elements	NA
FORM-9A	Details of Project Specific Loans	NA
FORM-9B	Details of Foreign loans	NA
FORM-9C	Calculation of Weighted Average Rate of Interest on Actual Loans	✓
FORM-9D	Loans in Foreign Currency	NA
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	NA
FORM- 11	Calculation of Interest on Working Capital	✓
FORM- 12	Details of time over run	NA
FORM- 12A	Incidental Expenditure during Construction	NA
FORM- 12B	Calculation of IDC & Financing Charges	✓
FORM- 13	Details of Initial spares	NA
FORM- 14	Non-Tariff Income	NA
FORM- 15	Summary of issue involved in the petition	✓
FORM A	Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL the assets covered in the present petition.	✓

No.	mation/ Documents 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)	NA
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.	NA
3	Copies of relevant loan Agreements	NA
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.	NA
6	Copies of the BPTA/TSA/PPA with the beneficiaries, if any	NA
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	Yes
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.	NA
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.	NA
10.	Any other relevant information, (Please specify)	NA

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.