

BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. ___/TT/ ___

IN THE MATTER OF: -

Petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Transmission Asset: 2 number of 220 kV Line Bays at Samba Sub-station under "**Northern Region System Strengthening-XLII**" in **Northern Region** 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

FILED BY

POWER GRID CORPORATION OF INDIA LTD.

GURGAON

REPRESENTED BY

DATED: 02.09.2024

Sr. General Manager (Regulatory)



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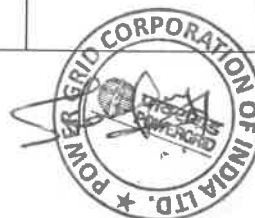
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GURGAON

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REPRESENTED BY

Sr. General Manager (Regulatory Cell)



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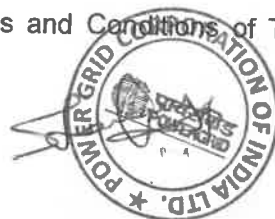
Represented by Its Chairman

And others

----- RESPONDENT(S)

To
The Secretary
Central Electricity Regulatory Commission
New Delhi 110001
Sir,

The present tariff Petition is filed under Section 62 read with Section 79 (1) (d) of 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:- 02.09.2024

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

Sr. General Manager (Regulatory Cell)



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Lucknow - 226 001

Represented by Its Chairman

And others

MEMO OF PARTIES

Power Grid Corporation of India Ltd.

VERSUS

--- PETITIONER

Northern Region

--- RESPONDENT

1. 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 POWER HOUSE, INDUSTRIAL AREA ,
JODHPUR – 342 003(RAJASTHAN)
REPRESENTED BY ITS MANAGING DIRECTOR
5. HIMACHAL PRADESH STATE ELECTRICITY BOARD LTD
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 CHAIRMAN AND MANAGING
DIRECTOR
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
9. 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
DISTRIBUTIONENGINEER
15. NEW DELHI MUNICIPAL COUNCIL
PALIKA KENDRA, SANSAD MARG,
NEW DELHI-110002
REPRESENTED BY CHAIRMAN
16. JAMMU & KASHMIR POWER TRANSMISSION CORPORATION LIMITED
PDD BUILDING, EXHIBITION GROUNDS, JAHANGIR CHOWK
SRINAGAR, JAMMU & KASHMIR-190009
REPRESENTED BY ITS CHAIRMAN

GURGAON

DATED: 02.09.2024

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY

Sr. General Manager (Regulatory Cell)



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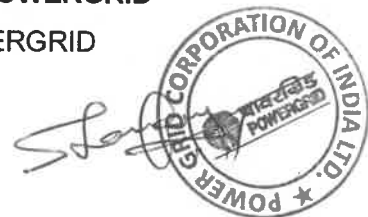
--- RESPONDENT(S)

MEMO OF APPEARANCE

POWER GRID CORPORATION OF INDIA LTD.

-- PETITIONER

1. Shri Dilip Nagesh Rozekar, ED (Commercial & RC), POWERGRID
2. Shri Mohd. Mohsin, Chief GM (Comml- Petition), POWERGRID
3. **Shri V.C. Sekhar, Sr. GM (Commercial-RC), POWERGRID**
4. Shri Zafrul Hasan, GM (Comml- Petition), 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 2nd day of September 2024.

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.

GURGAON

DATED:- 02.09.2024

Sr. General Manager (Regulation Cell)



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A. Executive Summary of the Petition:

(i) Brief Background of the Petitioner

1. The Petitioner herein, Power Grid Corporation of India Ltd. (Hereinafter referred to as "**POWERGRID/Petitioner**") is a Government Company within the meaning of the Companies Act, 2013. POWERGRID is deemed transmission licensee in terms of Section 14 of the Electricity Act, 2003. POWERGRID by virtue of a transmission licensee is required to inter-alia build, 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.

(ii) 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 Northern region in terms of the 2020 Sharing Regulations.

(iii) Background of Transmission Assets:

2. POWERGRID has filed the present petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for the below assets which have been implemented under "Northern Region System Strengthening-XLII" in Northern Region:

Asset No	Asset Name	DOCO
Asset-1	2 number of 220 kV Line Bays at Samba Sub-station	19.05.2021

(iv) Summary of Claims:

3. A. POWERGRID is seeking truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for aforesaid transmission asset on capital cost comprising of expenditure incurred/Admitted upto 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").



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

Rs in lakhs

Asset No.	Apportioned Approved Cost as per FR	Expenditure Up to DOCO /31.03.2019	Expenditure during 2019-24 tariff block					Capital Cost as on 31.03.2024
			2019-20	2020-21	2021-22	2022-23	2023-24	
Asset-1	804.00	457.55	0.00	0.00	189.38	75.62	28.65	751.20

Rs in lakhs

Asset No.	Apportioned Approved Cost as per FR	Expenditure Up to 31.03.2024	Projected expenditure during 2024-29 tariff block					Estimated completion Cost as on 31.03.2029
			2024-25	2025-26	2026-27	2027-28	2028-29	
Asset-1	804.00	751.20	3.37	0	0	0	0	754.57

5. **Details of Time- Overrun:** The entire delay of 51 days in commissioning of subject asset based on revised SCOD of 28.03.2021 was condoned by Hon'ble Commission vide its order dated 30.03.2024.

6. Details of tariff claimed are as under:

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

Rs in Lakhs

Name of the asset	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-1	AFC approved	-	-	121.40	164.28	173.79
	Revised AFC based on truing up	-	-	121.27	163.00	173.27

Tariff claimed for 2024-29 tariff block:

Rs in Lakhs

Name of the asset	2024-25	2025-26	2026-27	2027-28	2028-29
Asset-1	162.17	161.18	160.93	161.16	151.00

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



B. Detailed Petition:

MOST RESPECTFULLY SHOWETH:

Issue wise submission(s):

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 Asset:

Asset No	Asset Name	DOCNO	Remarks
Asset-1	2 number of 220 kV Line Bays at Samba Sub-station	19-05-2021	Earlier covered under petition no. 32/TT/2023 now covered under instant petition

11. Approval of the Scheme:

The Investment Approval (I.A.) of the transmission project was accorded by the Petitioner's Competent Authority on 25.07.2019 vide Memorandum Ref.: C/CP/PA1920- 04-0G-IA004, at an estimated cost of ₹804 lakh, including an Interest During Construction (IDC) of ₹29 lakh based on March 2019 price level.

12. Cost details:

The details of Capital Cost admitted for 2019-24 tariff block vide order dated 30.03.2024 in petition no. 32/TT/2023 for the asset covered in instant petition, and capital cost claimed as per auditor certificate for the truing up of 2019-24 are as tabulated below:



Asset-1

Rs in Lakhs

Capital Cost allowed vide order dated: 30.03.2024 in petition no. 32/TT/2023*							
Apportioned cost as per FR	Capital cost as on DOCO	Add -Cap 2019-24					Capital cost as on 31.03.2024
		2019-20	2020-21	2021-22	2022-23	2023-24	
804.00	458.99	0.00	0.00	189.38	130.31	0.00	778.68
Capital Cost now claimed in the instant petition							
Apportioned cost as per FR	Capital cost as on DOCO	Add -Cap 2019-24					Capital cost as on 31.03.2024
		2019-20	2020-21	2021-22	2022-23	2023-24	
804.00	457.55	0.00	0.00	189.38	75.62	28.65	751.20

*Hon'ble Commission vide order dated: 30.03.2024 in petition no: 32/TT/2023 disallowed IDC of ₹ 0.01 Lakhs due to computational difference and ₹ 15.58 lakh of excess Initial Spares under Substation head (₹3.35 lakh from DOCO cost and ₹12.23 lakh from 2021-22 add-cap).

Copy of orders is enclosed as **Encl-1**.

Capital cost for 2024-29 tariff block:

Rs in Lakhs

Asset Details	Apportioned cost as per FR	Expenditure as on 31.03.2024	Actual/Projected Add Cap 2024-29 as per auditor's certificate					Estimated completion cost as on 31.03.2029
			2024-25	2025-26	2026-27	2027-28	2028-29	
Asset-1	804.00	751.20	3.37	0	0	0	0	754.57

The overall Completion cost as on 31.03.2029 of the project is within the FR apportioned cost. A copy of the auditor certificate is enclosed at **Encl-2**.

13. Direction of Hon'ble Commission vide order dated: 30.03.2024 in petition no: 32/TT/2023 and its compliance:

As per para 23 "The Petitioner is, accordingly, directed to submit the final CEA energization certificate at the time of truing-up."



A copy of CEA energization certificate is enclosed hereto as Encl-3.

14. Commissioning schedule:

Asset	SCOD	Revised SCOD*	DOCO	Delay
Asset-1	28.10.2020	28.03.2021	19.05.2021	51 days (Condoned)

*Revised SCOD of the transmission asset is 28.03.2021 as per MoP letter dated: 27.07.2020

15. Initial spares:

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

Rs. in lakhs

Assets	Particulars	Cost for Spare Calculation (A)	Initial Spares Claimed (B)	Ceiling Limit (%) (C)	Initial Spares Worked out	Excess initial spares
					$D = [(A-B)*C / (100-C)]$	[B-D]
Asset-1	Substation (Brown Field)	677.35	56.65	6.0	39.62	17.03

It is submitted that excess Initial spares as per above table has been reduced from the capital cost of the asset based on initial spare discharge, at para-17 below. It is prayed to Hon'ble Central Commission to allow the initial spares as claimed in the instant petition. The initial spare discharge detail is tabulated below:

Rs in Lakhs

Asset	Total spares Claimed	Expenditure on initial Spares Upto COD and included in auditor certificate upto COD	Expenditure on initial spares in 2021-22 (Add Cap)
Asset-1	56.65	44.42	12.23

16. Details of the Additional Capitalization

Additional capitalization claims under Regulation:

SI No.	Asset	DOCO date	Cutoff date
1.	Asset-1	19-05-2021	31-05-2024



Add cap for 2019-24 block:

Asset	Add cap detail (₹ in Lakhs)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-1	0.00	0.00	200.66	75.62	28.65
	Applicable regulation				
	NA	NA	24(1)(a) & 24(1)(b)	24(1)(a) & 24(1)(b)	24(1)(a)

Add cap for 2024-29 block:

Asset	Add cap detail (₹ in Lakhs)				
	2024-25	2025-26	2026-27	2027-28	2028-29
Asset-1	3.37	0.00	0.00	0.00	0.00
	Applicable regulation				
	25(1)(d)	NA	NA	NA	NA

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 final invoices from the contractor and incorporating the amendments till the end of Tariff block 2019-24.

It is also submitted that the actual capital expenditure to be incurred during 2024-29 by the petitioner shall be finalized after the closing of contract which may happen to be higher or lower than the estimated add cap prepared and submitted. It is further submitted that the payments to be made during 2024-29 after submission of invoice and after reconciliation in accordance with contractual clause as per provisions of contract.



The additional capital expenditure claimed in the 2019-24 period and 2024-29 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. A liability flow statement having Package/ Contractor wise detail along with applicable regulation is enclosed at Encl-4.

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

Asset-1:

Rs in Lakhs

Sl.No	Expenditure	S/S	IT Equip.	Total
1	Expenditure upto DOCO As per Auditor Certificate	402.24	61.06	463.30
2	Less: Accrual IDC undischarged upto DOCO	0.82	0.13	0.95
3	Less: Excess Initial Spares	4.80	0.00	4.80
4	Expenditure upto DOCO Excluding Accrual IDC	396.62	60.93	457.55
5	Add Cap during 2021-22 as per auditor certificate	200.66	0.00	200.66
6	Add: Accrual IDC Discharge during FY 2021-22	0.82	0.13	0.95
7	Less: Excess Initial Spares	12.23	0.00	12.23
8	Expenditure 2021-22 (Including Accrual IDC)	189.25	0.13	189.38
9	Expenditure during 2022-23 (As per auditor certificate)	75.62	0.00	75.62
10	Expenditure during 2023-24 (As per auditor certificate)	18.30	10.35	28.65
11	Estimated expenditure during 2024-25 (As per auditor certificate)	3.37	0.00	3.37
12	Total Estimated Completion Cost	683.16	71.41	754.57

It is submitted that for the instant asset, Accrued IDC as on DOCO was not considered while calculating the tariff as the same was undercharged up to DOCO. The accrued IDC has been taken out of DOCO expenditure and added in the add cap, when it has been discharged in case of all assets covered under the instant petition. The Hon'ble Commission is requested to kindly allow IDC on the basis of cash outflow. Further, the entire amount of IEDC for the instant asset has been discharged as on DOCO. Cash IDC statement is enclosed at Encl-5.



18. **Debt: Equity Ratio:** The actual debt equity ratio deployed in instant asset is 70:30 for expenditure upto DOCO and all add-cap expenditures. Loan draws as per actual expenditure have been depicted in Form-9C while Form-9E is as per cost claimed for tariff as mentioned at para-17 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.

19. **Transmission tariff:**

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

Regulation 13 of Tariff Regulations, 2019:

Quote

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

-----"

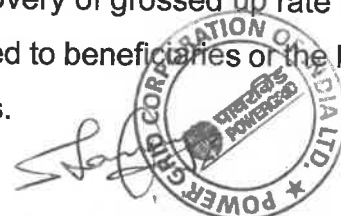
Unquote

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

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

Quote

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



Unquote

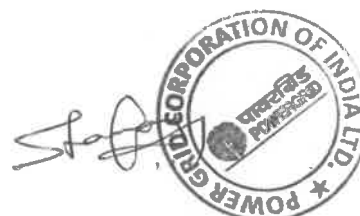
It is submitted that the Income Tax assessment of the Petitioner has been completed and Assessment Orders have been issued by the Income Tax Department for FY 2019-20 and 2020-21; and that the Income Tax returns have been filed with the Income Tax Department for FY 2021-22 & 2022-23. Further, it is submitted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

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

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

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

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



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

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

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

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.

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

Rs in Lakh

Project		2019-20	2020-21	2021-22	2022-23	2023-24
Asset-1	AFC approved	-	-	121.40	164.28	173.79
	Revised AFC based on truing up	-	-	121.27	163.00	173.27

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

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.

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

Rs in Lakh

Project		2024-25	2025-26	2026-27	2027-28	2028-29
Asset-1	AFC	162.17	161.18	160.93	161.16	151.00

Tariff filing forms along with the other relevant information and supporting documents are attached hereto as **Encl-7**.

22. The asset will complete its 12 Yrs after 2024-29 tariff block, and thus the depreciation has been calculated based on the rate specified as per clause 33 (5) of the CERC Tariff Regulations, 2024. The details have been computed and are provided in Form-10 A.
23. 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

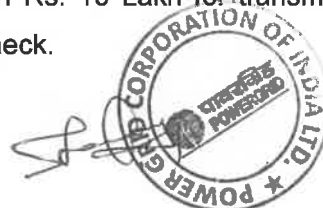


interest received from IT authorities shall be recoverable /adjustable during the tariff period 2024-29 on year to year basis on receipt of Income Tax assessment order.

24. 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 20 and para-21 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.
25. 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 will be submitted shortly with a Truing-up petition and the details of the same will be submitted through an affidavit once submitted. These documents/details will also be made available on our website www.powergrid.in.

26. The transmission charges at para-20 & 21 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.
27. That as per Regulation 36(3)(d) of CERC Tariff Regulations, 2024, the Security Expenses, Insurance and Capital Spares more than Rs. 10 Lakh for transmission system shall be allowed separately after prudence check.



Security Expenses:

In this regard, it is submitted that a separate petition shall be filed for truing up of security expenses from 01.04.2019 to 31.03.2024 under the Regulation 35 (3) (C) of Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2019 and recovery of security expenses from 01.04.2024 to 31.03.2029 under the Regulation 36 (3) (d) of Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2024.

Insurance:

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

Capital Spare:

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

28. 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.

29. 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.

30. The Transmission Charges and other related Charges indicated at para 20 & 21 above, is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, filing fees, license fee, RLDC fees and charges 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.

31. **Sharing of Transmission Charges**

Tariff for Transmission of Electricity (Annual Fixed Cost) for 2019-24 as per para 20 from 19.5.2021 to 25.7.2021 shall be borne by JKPTCL as directed by Hon'ble Commission vide order dated 30.03.2024 in Petition No.-32/TT/2023 and from 26.7.2021 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 21 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.

32. 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.-8 may please be treated as integral part of this petition.**

A. PRAYER

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

- a) Approve the trued-up Transmission Tariff for 2019-24 block and transmission tariff for 2024-29 block for the asset covered under this petition, as per para 20 & 21 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 20 & 21 above for respective block.
- d) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 94 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, and other expenditure (if any) in relation to the filing of petition.
- e) Allow the petitioner to bill and recover RLDC fees & charges and Licensee fee, separately from the respondents in terms of Regulation 94 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.
- f) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2024-29 period, if



any, from the respondents.

- g) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 26 above.
- h) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall insurance expenses and consequential IOWC on that insurance expenses as mentioned at para 27 above.
- i) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall capital spares as per actual as mentioned at Para 27 above.
- j) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition as mentioned at para 28 above.
- k) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

GURGAON
DATED:-02.09.2028

FILED BY
POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

(V. C. Sekhar)
Sr. General Manager (Regulatory)



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

PETITION NO.:

IN THE MATTER OF: Petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Transmission Asset: 2 number of 220 kV Line Bays at Samba Sub-station under "**Northern Region System Strengthening-XLII**" in Northern Region 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,
Katwaria Sarai, New Delhi. 110 016.

--- PETITIONER

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

Uttar Pradesh Power Corporation Ltd.

----- RESPONDENT(S)

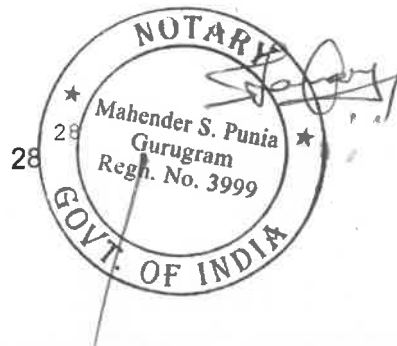
Shakti Bhawan, 14, Ashok Marg
Lucknow - 226 001

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 Powergrid 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: -



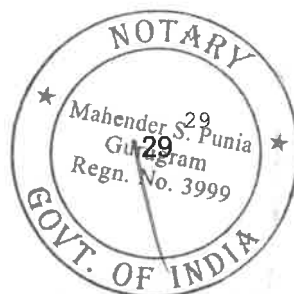
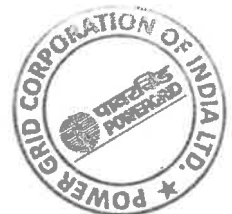
1. That the deponent is the Senior General Manager of Petitioner and is well conversant with the facts and the circumstances of the case and therefore competent to swear this affidavit.
2. That the accompanying Petition under Section 62 of the Electricity Act, 2003, has been filed by my authorized representative/nominated 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 32 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 32 of the Petition are believed to be true on the basis of the legal advice received.
4. That the annexures annexed to the Petition are correct and true copies of the respective originals.
5. That the Deponent has not filed any other Petition or Appeal before any other forum or court of law with respect to the subject matter of the dispute

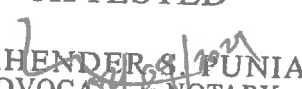

(DEPONENT)

VERIFICATION

Solemnly affirmed at Gurgaon on this 02nd day of Sept' 2024 that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.


(DEPONENT)



ATTESTED

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

Ref: CC/Commercial/2024

Date: 28.08.2024


LETTER OF AUTHORIZATION

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

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

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

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


28/08/2024
Dilip Nagesh Rozekar

Executive Director (Commercial & RC)

दिलीप रोजेकर / DILIPROZEKAR

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



**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 32/TT/2023

Coram:

**Shri Jishnu Barua, Chairperson
Shri Arun Goyal, Member**

Date of Order: 30.03.2024

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 determination of transmission tariff from COD to 31.3.2024 for "2 number of 220 kV Line Bays at Samba Sub-station" covered under "Northern Region System Strengthening-XLII" in Northern Region.

And in the matter of:

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

... Petitioner

Vs.

1. Ajmer Vidyut Vitran Nigam Limited,
Corporate Office, Vidyut Bhawan,
Panchsheel Nagar, Makarwali Road,
Ajmer-305004.
2. Jaipur Vidyut Vitran Nigam Limited,
Vidyut Bhawan,
Janpath, Jyoti Nagar,
Jaipur-302005.
3. Jodhpur Vidyut Vitran Nigam Limited,
New Power House, Industrial Area,
Jodhpur-342003.
4. Himachal Pradesh State Electricity Board Limited,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004.

ATTESTED TRUE COPY
Page - 31 to 65
Authorised Signatory
Power Grid Corporation of India Ltd.
Plot No. 2, Sector-29, Gurgaon-122001 (HARYANA)



5. Punjab State Power Corporation Limited,
The Mall, PSEB Head Office,
Patiala-147001 (Punjab).
6. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula- 134109 (Haryana).
7. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat,
Jammu.
8. Uttar Pradesh Power Corporation Limited,
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001 (Uttar Pradesh).
9. BSES Yamuna Power Limited,
B-Block, Shakti Kiran, Building (Near Karkadooma Court),
Karkadooma, 2nd Floor,
New Delhi-110092.
10. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi-110019.
11. Tata Power Delhi Distribution Limited,
NDPL house, Hudson Lines Kingsway Camp,
Delhi-110009.
12. Chandigarh Administration,
Sector-9,
Chandigarh.
13. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun (Uttarakhand).
14. North Central Railway,
DRM Office, Nawab Yusuf Road Prayagraj,
Uttar Pradesh-211011.
15. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002 .



16. Jammu & Kashmir Power Transmission Corporation Limited,
PDD Building, Exhibition Grounds, Jahangir Chowk,
Srinagar,
Jammu & Kashmir-190009.

... Respondent(s)

For Petitioner : Shri Bipin Bihari Rath, PGCIL
Shri Vivek Singh, PGCIL
Ms. Supriya Singh, PGCIL
Shri Amit Yadav, PGCIL
Ms. Ashita Chauhan, PGCIL

For Respondents : None

ORDER

Power Grid Corporation of India Limited has filed the instant petition for the determination of transmission tariff for the period from the date of commercial operation (COD) to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of 2 number of 220 kV Line Bays at Samba Sub-station (hereinafter referred to as 'the transmission asset') covered under "Northern Region System Strengthening-XLII" in Northern Region (hereinafter referred to as 'the transmission project').

Background

2. The brief facts of the case are as follows:
 - a. The scope of the scheme was discussed and agreed upon in the 1st meeting of the Northern Region Standing Committee on Transmission held on 11.9.2018, 2nd meeting of the National Committee on Transmission held on 4.12.2018, 3rd meeting of the Empowered Committee on Transmission held on 21.12.2018 and 43rd NRPC/40th TCC meeting held on 30.10.2018 and 29.10.2018, respectively.



b. The Investment Approval (IA) of the transmission project was accorded by the Petitioner's Competent Authority on 25.7.2019 vide Memorandum Ref.: C/CP/PA1920-04-0G-IA004, at an estimated cost of ₹804 lakh, including an Interest During Construction (IDC) of ₹29 lakh based on March, 2019 price level.

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

Sub-stations:

400/220 kV Samba (Jatwal) Sub-station (Extension)

220 kV line bay: two (for termination of 220 kV Double Circuit ("D/C") Samba (PDD)-Samba (Jatwal) transmission line of Jammu and Kashmir PDD

d. The transmission asset is the only asset covered in the transmission project.

e. The Petitioner has submitted that the transmission asset was charged on a 'no load' basis on 17.5.2021 due to the non-availability of the associated downstream network, i.e. 220 kV D/C Samba (PDD)-Samba (Jatwal) transmission line of Jammu and Kashmir PDD. The Petitioner furnished the RLDC certificate for 'no load charging' on 17.5.2021. The Petitioner has given notice regarding the charging of the transmission asset to the Jammu & Kashmir Power Transmission Corporation Limited (JKPTCL). Therefore, the transmission asset qualifies for approval of COD as per Regulation 5(2) of the 2019 Tariff Regulations. A copy of CEA/RLDC/CMD Certificates of the transmission asset and intimation/ notice served upon JKPTCL have been submitted by the Petitioner.

3. 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 Capitalisation 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) 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.

4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.

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

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

7) Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses separately as mentioned at para 8.8 above.

8) Allow the initial spare as procured in the current petition in full as claimed in the instant petition under Regulation 54 of the CERC (Terms and Condition of Tariff) Regulation, 2014, "Power to Relax" and 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.

11) Approve DOCO of Asset-1 as 19.05.2021 under the proviso 5 (2) of CERC (Terms and conditions of Tariff) Regulation, 2019.

12) Condone the Time overrun of all the assets as per clause 22 (2) of Tariff Regulation' 2019.

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

4. The present petition covers approval of tariff based on the actual expenditure incurred up to COD and additional capitalization projected to be incurred from COD to 31.3.2024 in respect of the transmission asset. The capital cost incurred up to COD duly certified by the



Auditor's Certificate and additional expenditures projected to be incurred during 2021-22 and 2022-23 with respect to the transmission asset are as follows:

Approved cost	Expenditure up to COD	Additional Capital Expenditure (ACE)			(₹ in lakh)
		2021-22	2022-23	2023-24	Estimated completion cost
804.00	463.30	200.66	130.31	0.00	794.27

5. The Respondents, mainly the beneficiaries of the Northern Region, are distribution licensees, transmission licensees and power departments which are procuring transmission service from the Petitioner.
6. The Petitioner has served the petition on the Respondents and notice regarding filing of the instant petition has also 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. JKPTCL, Respondent No. 16, has filed its reply vide letter dated 18.10.2023 and has submitted that the associated transmission network has been put under commercial operation on 26.7.2021. The submissions made by JKPTCL and clarifications thereto given by the Petitioner have been dealt with in the relevant portions of this order.
7. The final hearing in this matter was held on 30.10.2023, and the order was reserved.
8. This order is issued considering the submissions made by the Petitioner vide affidavit dated 11.8.2022 in the main petition, JKPTCL's letter dated 18.10.2023, and the Petitioner's rejoinder filed vide affidavit dated 21.11.2023.
9. Having heard the Representatives for the Petitioner and perused the material on record, we proceed to dispose of the petition.



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

10. The Petitioner has claimed the following transmission charges in respect of the transmission asset for the 2019-24 tariff period:

Sl. No.	Particulars	(₹ in lakh)		
		2021-22 (pro-rata for 317 days)	2022-23	2023-24
1	Depreciation	30.97	44.94	48.88
2	Interest on Loan	19.63	27.33	27.25
3	Return on Equity	27.56	41.08	44.75
4	Interest on Working Capital	2.61	3.38	3.54
5	O&M Expenses	41.90	49.92	51.68
	Total Annual Fixed Charges	122.67	166.65	176.10

11. The Petitioner has claimed the following Interest on Working Capital (IWC) in respect of the transmission asset for the 2019-24 tariff period:

Particulars	(₹ in lakh)		
	2021-22 (pro-rata for 317 days)	2022-23	2023-24
O&M Expenses-one month	4.02	4.16	4.31
Maintenance Spares 15% of O&M Expenses	7.24	7.49	7.75
Receivables equivalent to 45 days of AFC	17.41	20.55	21.65
Total Working Capital	28.67	32.20	33.71
Bank rate as on 1.4.2019 or as on 1 st April of the COD year, whichever is later (in %)	10.50	10.50	10.50
Interest on Working Capital	3.01	3.38	3.54
Pro-rata Interest on Working Capital	2.61	3.38	3.54

Date of Commercial Operation (COD)

12. The Petitioner has claimed COD of the transmission asset as 19.5.2021 under Regulation 5(2) of the 2019 Tariff Regulations as the associated downstream system being executed by JKPTCL is not ready. The Petitioner has further submitted that the transmission asset was charged under a 'no load' basis on 17.5.2021, and COD has been claimed as 19.5.2021 under Regulation 5(2) of the 2019 Tariff Regulations.

13. 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.

(3) The date of commercial operation in case of integrated mine(s), shall mean the earliest of —

- (a) the first date of the year succeeding the year in which 25% of the Peak Rated Capacity as per the Mining Plan is achieved; or
- (b) the first date of the year succeeding the year in which the value of production estimated in accordance with Regulation 7A of these regulations, exceeds total expenditure in that year; or
- (c) the date of two years from the date of commencement of production:

Provided that on earliest occurrence of any of the events under sub-clauses (a) to (c) of Clause (3) of this Regulation, the generating company shall declare the date of commercial operation of the integrated mine(s) under the relevant sub-clause with one week prior intimation to the beneficiaries of the end-use or associated generating station(s);

Provided further that in case the integrated mine(s) is ready for commercial operation but is prevented from declaration of the date of commercial operation for reasons not attributable to the generating company or its suppliers or contractors or the Mine Developer and Operator, the Commission, on an application made by the generating company, may approve such other date as the date of commercial operation as may be considered appropriate after considering the relevant reasons that prevented the declaration of the date of commercial operation under any of the sub-clauses of Clause (3) of this Regulation;

Provided also that the generating company seeking the approval of the date of commercial operation under the preceding proviso shall give prior notice of one month to the beneficiaries of the end-use or associated generating station(s) of the integrated mine(s) regarding the date of commercial operation."



14. In support of COD claim of the transmission asset, the Petitioner has furnished a copy of the provisional Central Electricity Authority (CEA) energization certificate, RLDC charging certificate, CMD certificate and self-declaration letter regarding COD

15. The Commission vide Record of Proceedings (RoP) for hearing dated 27.9.2023 observed as follows:

“3. The Commission observed that it would like to hear JKPTCL on the Petitioner’s request for approval of the COD of the transmission asset under Regulation 5(2) of the 2019 Tariff Regulations on the plea that the associated transmission system under the scope of JKPTCL was not ready. Accordingly, the Commission directed JKPTCL to be present on the next date of the hearing and also to file its reply.”

16. As per the directions of the Commission in RoP dated 27.9.2023, JKPTCL submitted that the construction of associated transmission system i.e. two 220 kV line bays at 400/220 kV Samba (PG) Sub-station, were constructed by the Petitioner for feeding 220/66 kV Samba (JKPTCL) Sub-station. The work of the associated transmission system i.e. two transmission lines from 400/220 kV Samba (PG)-220/66 kV Samba (JKPTCL) Sub-station and the 220/66 kV Samba (JKPTCL) Sub-station was also tendered/awarded by the Petitioner. The 220/66 kV Grid Station IGC, Samba, was charged on 14.7.2021 and put on load on 26.7.2021. The delay in charging was due to the lockdown during Covid-19 and severe RoW issues.

17. In response, the Petitioner has submitted that 400/220 kV Samba (PG)-220/66 kV Samba (JKPTCL) along with 220/66 kV Samba (JKPTCL) Sub-station are owned by JKPTCL. The Petitioner was entrusted to implement the 400/220 kV Samba (PG)-220/66 kV Samba (JKPTCL) along with 220/66 kV Samba (JKPTCL) Sub-station of JKPTCL on a consultancy basis. The said line was charged on 14.7.2021 and was put on load with effect from 27.7.2021. The Petitioner has submitted that the delay in execution of the said transmission line is not attributable to the Petitioner.



18. We have considered the submissions of the Petitioner and JKPTCL. The Petitioner has sought a declaration of COD for the transmission asset as 19.5.2021 under Regulation 5(2) of the 2019 Tariff Regulations. In support of COD of the transmission asset, the Petitioner has submitted the provisional CEA Energization Certificate dated 12.5.2021 under Regulation 43 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, RLDC Charging Certificate on 'no load' basis, self-declaration of COD letter dated 12.4.2019, and CMD certificate as required under the Grid Code. Taking into consideration the CEA Energization Certificate, RLDC Charging Certificate on the 'no load' basis, and the CMD's Certificate, the COD of the transmission asset is approved as 19.5.2021 under Regulation 5(2) of the 2019 Tariff Regulations.

19. The provisional energization certificate dated 12.5.2021 shows that the energization certificate is accorded up to 12.8.2021, subject to consistent compliance with the relevant provisions of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010. The Petitioner is, accordingly, directed to submit the final CEA energization certificate at the time of truing-up.

Capital Cost

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

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

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

(a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*

(b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*

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

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



- (e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
- (h) Adjustment of revenue earned by the transmission licensee by using the Asset-before the date of commercial operation;
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway.
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
- (n) Expenditure on account of change in law and force majeure events; and
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (3) The Capital cost of an existing project shall include the following:
- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
- (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (4) The capital cost in case of existing or new hydro generating station shall also include:
- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi 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 Asset-forming part of the project, but not in use, as declared in the tariff petition;
- (b) De-capitalised Asset-after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:
- Provided that in case replacement of transmission Asset-is recommended by Regional Power Committee, such Asset-shall be decapitalised only after its redeployment;



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

(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.”

21. The Petitioner has submitted the Auditor's Certificate and has claimed the following capital cost incurred as on COD and has projected Additional Capital Expenditure (ACE) to be incurred in respect of the transmission asset and the same is as follows:

Approved cost	Expenditure up to actual COD	Additional Capital Expenditure (ACE)			(₹ in lakh)
		2021-22	2022-23	2023-24	Estimated completion cost
804.00	463.30	200.66	130.31	0.00	794.27

22. The Petitioner has submitted that the estimated completion cost of the transmission asset is within the FR cost, and there is no cost over-run. With regard to item-wise cost variation between apportioned approved cost and estimated completion cost, the Petitioner has submitted that it, being a Government enterprise, has been following a well laid down procurement policy, which ensures both transparency and competitiveness in the bidding process. The Petitioner further submitted that through this process, the lowest possible market prices for the required products/services as per detailed designing are obtained, and contracts are awarded on the basis of the lowest evaluated eligible bidder. Further, the best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market forces, design and site requirements; in comparison, the estimates are prepared by the Petitioner as per well-defined procedures. 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 Petitioner has also submitted that the packages under the



subject scope of works comprise a large number of items, and the same are awarded through open competitive bidding. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items under the said package. Further, the lowest bidder can be arrived at after evaluating bids on overall basis only. Hence, item-wise unit prices in contracts and their variation over unit rate considered in FR estimates are beyond the control of the Petitioner. The Petitioner further submitted that the cost estimate of the transmission project is on the basis of the March, 2019 price level.

23. We have considered the Petitioner's submissions. The estimated completion of the transmission asset is lower than the FR cost by ₹9.73 lakh. Accordingly, the capital cost claimed by the Petitioner is approved.

Time Over-run

24. The Petitioner has submitted that as per IA dated 29.7.2019, the transmission project was scheduled to be executed within 15 months from the date of IA. Hence, the scheduled date of commercial operation (SCOD) was 28.10.2020, against which the transmission asset was executed on 19.5.2021, with a time over-run of 202 days.

25. The Petitioner submitted that the time over-run in the execution of the transmission asset was due to the Covid-19 pandemic, which had completely stalled the work for around 151 days and delay in inspection of the element by CEA for around 51 days. The Petitioner has submitted the following reasons for the delay.

Delay due to Worldwide Covid-19 Pandemic

26. The construction work was in full swing, and unfortunately, in the month of March, 2020, the Covid-19 pandemic was declared. It was difficult to continue the work as most of the labourers went to their hometowns, and construction work was stopped. The Petitioner has



submitted that recognizing the sensitivity of the project and understanding the gravity of the outbreak of the Covid-19 pandemic, the Ministry of Power (MoP) granted an extension of 5 months in SCOD of the projects scheduled to be put under the commercial operation after March 2020 vide its letter dated 27.7.2020. Accordingly, the SCOD of the transmission project was extended by 5 months to 28.3.2021.

Delay in inspection of the element by CEA

27. The Petitioner has submitted that the delay beyond 29.3.2021 was mainly on account of a delay in inspection of the element by CEA as all major works were completed in March 2021, and an online request for inspection and clearance from CEA was submitted on 24.3.2021. However, as the second wave of Covid-19 had set in, the CEA Inspector could not visit the site and finally, the site was inspected through video conferencing in May 2021, and the bays were charged on a 'no load basis' on 17.5.2021.

28. The Petitioner has prayed the Commission to condone the time over-run in the execution of the transmission asset as the same was due to uncontrollable factors and is covered by Regulation 22(2) of the 2019 Tariff Regulations.

29. We have considered the submissions of the Petitioner and have also gone through the record. The transmission asset was scheduled to be put into commercial operation within 15 months from the date of approval of the IA dated 29.7.2019, against which the transmission asset has been put under deemed CoD on 19.5.2021. . There is a delay of 202 days in the commercial operation of the transmission asset. The Petitioner has submitted that the delay of 151 days, i.e. from the time period from 28.10.2020 to 28.3.2021, is due to the Covid-19 pandemic and 51 days' delay from 29.3.2021 to 11.5.2021 is owing to the delay in the inspection of the element by the CEA.



30. MoP vide its letter dated 27.7.2020, has extended the SCOD in respect of the inter-State transmission project by 5 months due to the Covid-19 pandemic. The relevant portion of the letter dated 27.7.2020 is as follows:

"Sub: Extension to TSP/Transmission Licensees for completion of under construction inter State transmission projects

Sir,

I am directed to state that transmission utilities have pointed out that construction activities at various transmission project sites have been severely affected by the nationwide lockdown measures announced since 25th march, 2020 to contain outbreak of COVID-19 and have requested for extension of Scheduled Commercial Operation (SCOD) to mitigate the issues of disruption in supply chains and manpower, caused due to outbreak of COVID19 pandemic.

2. It has been, therefore, decided that;

i. All inter-state transmission projects, which were under construction as on date of lockdown i.e. 25th March 2020, shall get an extension of five months in respect of SCOD.

ii. This order shall not apply to those projects, whose SCOD date was prior to 25th March 2020.

iii. Start date of Long Term Access granted to a generator by CTU based on completion of a transmission line, whose SCOD is extended by 5 months due to COVID-19 as mentioned above at point(i), shall also be extended by 5 months."

31. In the aforesaid letter MoP, taking into consideration that the construction activities of the various transmission projects were severely affected by the nationwide lockdown from 25.3.2020 due to the outbreak of Covid-19, decided that all inter-State transmission projects which were under construction as on the date of lockdown, i.e. on 25.3.2020, shall get an extension of 5 months in respect of SCOD provided the SCOD of these projects was post 25.3.2020. In the present case, the transmission project of the Petitioner was under construction on the date of lockdown, i.e. on 25.3.2020, and SCOD of the transmission project was 28.10.2020, i.e. post 25.3.2020 and, therefore, the dispensation provided by the MoP vide its letter dated 27.7.2020 is applicable to the present case. Accordingly, the SCOD of the transmission project is extended by 5 months (151 days), and the revised SCOD is considered



as 28.3.2021. Accordingly, the time over-run of 151 days from the actual SCOD on 28.10.2020 to 28.3.2021 is condoned.

32. There is a further time over-run of 51 days beyond 28.3.2021 in declaring the commercial operation of the transmission asset, and the Petitioner has attributed the same to the delay in CEA inspection. The Petitioner has submitted that the period from 29.3.2021 to 19.5.2021 (51 days) was due to a delay in the inspection of the element by the CEA. We have gone through the submissions of the Petitioner and documentary evidence in support of the same. The Petitioner made an online application on 24.3.2021 and, vide letter its dated 11.5.2021, requested CEA for urgent charging. The CEA, vide its letter dated 12.5.2021, granted a provisional energization certificate and also expressed difficulty in physical inspection due to the Covid-19 pandemic. Thereafter, the Petitioner charged the two 220 kV bays on a 'no-load basis' on 17.5.2021 and claimed the COD of the transmission asset as 19.5.2021. As the Regional Inspectorial Organization (North) expressed difficulty in physical inspection due to the Covid-19 pandemic and granted provisional certificate on 12.5.2021, we are of the view that the period from 24.3.2021 (date of submission of application for CEA clearance) to 12.5.2021 (grant of provisional energization certificate by CEA) is beyond the control of the Petitioner. Therefore, we condone the time over-run of 51 days due to delay in inspection of the element by CEA. Accordingly, the total time over-run of 202 days in the case of the transmission asset, is condoned.

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

33. The Petitioner has claimed IDC in respect of the transmission asset and has submitted the statement of IDC claim, discharge of IDC liability as on the date of commercial operation and thereafter. The same are as follows:



(₹ in lakh)		
IDC as per Auditor's Certificate	IDC Discharged up to COD	Un-discharged IDC up to COD
3.70	2.75	0.95

34. The allowable IDC in respect of the transmission asset has been worked out considering the information submitted by the Petitioner. The loan details submitted in Form-9C and the date of drawl submitted in IDC statements have been considered for the purpose of calculation of IDC for the transmission asset. Accordingly, the IDC allowed in respect of the transmission asset is as follows:

(₹ in lakh)				
IDC as per Auditor's Certificate	IDC allowed	IDC disallowed as on COD due to computational difference	Undischarged portion of IDC as on COD*	IDC allowed up to COD on a cash basis
3.70	3.69	0.01	0.95	2.74

* The un-discharged IDC as on COD of the transmission asset has been adjusted from capital cost as on COD and is considered as ACE in the year in which it is discharged.

35. The Petitioner has submitted that the entire amount of IEDC covered under the instant petition has been discharged up to COD. The details of the same are as follows:

(₹ in lakh)		
IEDC claimed as per Auditor's Certificate	IEDC considered by the Petitioner as on COD	IEDC discharged up to COD
90.54	90.54	90.54

36. The IEDC details considered in respect of the transmission asset for the purpose of computation of tariff are as follows:

(₹ in lakh)	
IEDC claimed as per Auditor's Certificate	IEDC allowed as on COD
90.54	90.54

As the entire time over-run has been condoned, IEDC claimed by the Petitioner is allowed.



Initial Spares

37. The Petitioner has calculated Initial Spares considering the sub-station as a brown field category and as per the cost certified in the Auditor's Certificate. Initial Spares claimed by the Petitioner are as follows:

(₹ in lakh)					
Asset Type	Plant and Machinery cost excluding IDC, IEDC, land cost and cost of civil works for the purpose of initial spares (A)	Initial Spares claimed (B)	Ceiling Limit (in %) (C)	Initial Spares worked out $D = (A - B) * C / (100 - C)$	Excess Initial Spares (B-D)
Sub-station (Brown Field)	700.02	56.65	6	41.07	15.58

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

39. The Petitioner has furnished the break-up of year-wise Initial Spares discharged for the transmission asset, and the same are as follows:

(₹ in lakh)		
Sl. No.	Particulars	Sub-station
1	Expenditure up to COD	44.42
2	Expenditure during 2021-22	12.23
Total		56.65



40. The Petitioner has submitted that the Initial Spares claimed under the sub-station exceed the allowable limits as per the 2019 Tariff Regulations. The Petitioner also submitted that Initial Spares procured are the essential spares for smooth running of the grid and may be allowed in full under Regulation 76 of the 2019 Tariff Regulations, "Power to Relax".

41. We have considered the submissions of the Petitioner. In the absence of any compelling reason for us to deviate from the norms, we allow the Initial Spares for the transmission asset as per Regulation 23(d) of the 2019 Tariff Regulations. Accordingly, the excess Initial Spares claimed by the Petitioner is disallowed.

42. The allowable Initial Spares in respect of the transmission asset are as follows:

(₹ in lakh)						
Asset Type	Plant and Machinery cost excluding IDC, IEDC, land cost and cost of civil works for the purpose of initial spares (A)	Initial Spares Claimed (B)	Ceiling (in %) (C)	Initial Spares worked out $D = (A - B) * C / (100 - C)$	Excess Initial Spares (B-D)	Initial Spares allowed
Sub-station (Brown Field)	700.02	56.65	6	41.07	15.58	41.07

Capital Cost Allowed as on COD

43. Accordingly, the capital cost allowed in respect of the transmission asset as on COD is ₹459.00 lakh as submitted by the Petitioner as per the Auditor's certificate, and the same is as follows:

(₹ in lakh)				
Capital cost claimed till COD	Less: Disallowed IDC due to computational difference	Less: Undischarged IDC	Less: Excess Initial Spares	Capital Cost as on COD
463.30	0.01	0.95	3.35	458.99



Additional Capitalisation

44. The Petitioner has submitted that the admissibility of ACE incurred after COD is to be dealt with in accordance with the provisions of Regulation 24 of the 2019 Tariff Regulations.

45. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as follows:

"24. Additional Capitalization

(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. *Un discharged 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; and*
- 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 ACE 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 cutoff 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; and g) 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."

46. We have considered the submissions of the Petitioner. ACE claimed by the Petitioner is towards undischarged liabilities recognized to be payable at a future date and balance work deferred for execution and accordingly allowed under Regulation 24(1)(a) of the 2019 Tariff Regulations. .

47. We have already disallowed the excess Initial Spares of ₹12.23 lakh, which has been discharged in 2021-22. The summary of the ACE allowed in respect of the transmission asset as follows:

Particulars	ACE allowed		
	2021-22	2022-23	2023-24
ACE (Claimed)	200.66	130.31	0.00
Less: Excess Initial Spares	12.23	0.00	0.00
Add: Discharged IDC	0.95	0.00	0.00
ACE (allowed)	189.38	130.31	0.00

48. The capital cost for the transmission asset allowed as on 31.3.2024 is as follows:

Particulars	As on COD	ACE allowed			Total
		2021-22	2022-23	2023-24	
ACE	458.99	189.38	130.31	0.00	778.68

Debt-Equity Ratio

49. Regulation 18 of the 2019 Tariff Regulations provides as follows:

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

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:



ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

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

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

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

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

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

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

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

(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.”

50. The Petitioner has claimed the debt-equity ratio of 70:30 in respect of the transmission asset, and the same has been considered by the Commission in accordance with Regulation 18(1) of the 2019 Tariff Regulations, which is as follows:

Funding	Capital cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	321.29	70.00	545.08	70.00
Equity	137.70	30.00	233.60	30.00
Total	458.99	100.00	778.68	100.00



Depreciation

51. Regulation 33 of the 2019 Tariff Regulations provides as follows:

“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 Asset-of the generating station and transmission system:

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

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

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the



project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

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

(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."

52. The Commission has considered the submissions of the Petitioner. The IT equipment has been considered as part of the gross block and depreciated using the Weighted Average Rate of Depreciation (WAROD). WAROD has been worked out and placed as Annexure-I after considering the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered Nil, i.e. IT asset has been considered as 100% depreciable. Depreciation allowed in respect of the transmission asset for the 2019-24 tariff period is as follows:

		(₹ in lakh)		
	Particulars	2021-22 (pro-rata 317 days)	2022-23	2023-24
A	Opening Gross Block	458.99	648.37	778.69
B	Addition during the year 2019-24 due to projected ACE	189.38	130.31	0.00
C	Closing Gross Block (A+B)	648.37	778.68	778.68
D	Average Gross Block (A+C)/2	553.68	713.53	778.68
E	Average Gross Block (90% depreciable assets)	492.99	647.59	707.57
F	Average Gross Block (100% depreciable assets)	60.69	65.93	71.11



	Particulars	2021-22 (pro-rata 317 days)	2022-23	2023-24
G	Depreciable value (excluding IT equipment and software) (E*90%)	443.69	582.83	636.81
H	Depreciable value of IT equipment and software (F*100%)	60.69	65.93	71.11
I	Total Depreciable Value (G+H)	504.38	648.77	707.92
J	Weighted average rate of Depreciation (WAROD) (in %)	6.35	6.18	6.17
K	Lapsed useful life at the beginning of the year (Year)	0	0	1
L	Balance useful life at the beginning of the year (Year)	25	25	24
M	Depreciation during the year (D*J)	30.51	44.08	48.03
N	Cumulative Depreciation at the end of the year	30.51	74.60	122.62
O	Remaining Aggregate Depreciable Value at the end of the year	473.87	574.17	585.30

Interest on Loan (IoL)

53. Regulation 32 of the 2019 Tariff Regulations provides as follows:

“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 decapitalization of asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

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

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

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

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

(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”.

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

		(₹ in lakh)		
	Particulars	2021-22 (pro-rata 317 days)	2022-23	2023-24
A	Gross Normative Loan	321.29	453.86	545.08
B	Cumulative Repayments up to Previous Year	0.00	30.51	74.60
C	Net Loan-Opening (A-B)	321.29	423.35	470.48
D	Addition due to ACE	132.57	91.22	0.00
E	Repayment during the year	30.51	44.08	48.03
F	Net Loan-Closing (C+D-E)	423.35	470.48	422.45
G	Average Loan (C+F)/2	372.32	446.91	446.47
H	Weighted Average Rate of Interest on Loan (in %)	5.97	5.98	5.98
I	Interest on Loan (G*H)	19.30	26.73	26.70

Return on Equity (RoE)

55. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide as follows:

“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 due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system 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."

56. The Petitioner has submitted that the MAT rate applies to it. The MAT rate applicable has been considered for the purpose of RoE, which shall be trued up with the actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations.

57. We have considered the submissions of the Petitioner. The RoE is allowed as provided under Regulation 30 and Regulation 31 of the 2019 Tariff Regulations, and it is as follows:

		(₹ in lakh)		
	Particulars	2021-22 (pro-rata 317 days)	2022-23	2023-24
A	Opening Equity	137.70	194.51	233.60
B	Addition due to ACE	56.81	39.09	0.00
C	Closing Equity (A+B)	194.51	233.60	233.60
D	Average Equity (A+C)/2	166.10	214.06	233.60
E	Return on Equity (Base Rate) (in %)	15.50	15.50	15.50
F	Tax Rate applicable (in %)	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax) (in %)	18.782	18.782	18.782
H	Return on Equity (Pre-tax) (D*G)	27.09	40.20	43.87

Operation & Maintenance Expenses (O&M Expenses)

58. O&M Expenses claimed by the Petitioner for the 2014-19 tariff period are as follows:

		(₹ in lakh)		
	Particulars	2021-22 (pro-rata 317 days)	2022-23	2023-24
	O&M Expenses	41.90	49.92	51.68

59. Regulation 35(3)(a) of the 2019 Tariff Regulations provide as follows:



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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.26	0.27	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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



Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ± 500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years

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

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

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

”

60. We have considered the submissions of the Petitioner. O&M Expenses are allowed as per Regulation 35(3)(a) of the 2019 Tariff Regulations, and it is as follows:

Particulars	(₹ in lakh)		
	2021-22 (pro-rata 317 days)	2022-23	2023-24
2 number of 220 kV Bays at Samba Sub-station	41.90	49.92	51.68

Interest on Working Capital (IWC)

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



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

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

(i) Receivables equivalent to 45 days of annual fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and

(iii) Operation and maintenance expenses, including security expenses for one month.

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

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

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

“3. 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.”

62. The Petitioner submitted that it computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on COD of the transmission project. The Petitioner has considered the rate of IWC to be 10.50%.

63. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) considered is 10.50% (SBI 1-year MCLR applicable as on COD of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon with respect to the transmission asset are as follows:

Particulars	(₹ in lakh)		
	2021-22 (pro-rata 317 days)	2022-23	2023-24
Working capital for O&M Expenses (O&M Expenses for one month)	3.49	4.16	4.31
Working capital for Maintenance Spares (15% of O&M Expenses)	6.28	7.49	7.75
Working Capital for Receivables (Equivalent to 45 days of Annual Fixed Cost /Annual Transmission Charges)	14.97	20.25	21.37
Total Working Capital	24.74	31.90	33.43
Rate of Interest for Working Capital (in %)	10.50	10.50	10.50
Interest on Working Capital	2.60	3.35	3.51



Annual Fixed Charges for 2019-24 Tariff Period

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

Particulars	(₹ in lakh)		
	2021-22 (pro-rata 317 days)	2022-23	2023-24
Depreciation	30.51	44.08	48.03
Interest on Loan	19.30	26.73	26.70
Return on Equity	27.09	40.20	43.87
O&M Expenses	41.90	49.92	51.68
Interest on Working Capital	2.60	3.35	3.51
Total	121.40	164.28	173.79

Filing Fee and Publication Expenses

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

License Fee and RLDC Fees and Charges

66. The Petitioner shall be entitled to reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period. The Petitioner shall also be entitled 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

67. The Petitioner has submitted that if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of



demand from Government/Statutory Authorities, the same may be allowed to be recovered from the beneficiaries.

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

Security Expenses

69. 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 consequential IWC.

70. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it 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 said Petition has already been disposed of by the Commission vide order dated 3.8.2021. 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.

Sharing of Transmission Charges

71. We have already approved the COD of the transmission asset as 19.5.2021 under Regulation 5(2) of the 2019 Tariff Regulations due to the non-readiness of the associated transmission line under the scope of JKPTCL on 19.5.2021. JKPTCL has submitted in its reply that the work of associated two transmission lines under the scope of JKPTCL was also tendered/ awarded by the Petitioner. We are of the view that any delay in execution of the associated transmission lines under the scope of JKPTCL should be settled as per the terms



of the contract/ agreement between the JKPTCL (or the Petitioner on behalf of JKPTCL) and the contractors. As the transmission assets could not be put into commercial operation due to the delay in execution of the associated two transmission lines under the scope of JKPTCL, the transmission charges from the deemed DOCO of the transmission asset, i.e. from 19.5.2021 till the COD of the associated transmission line of JKPTCL should be borne by JKPTCL. It is noticed that the associated transmission line under the control of JKPTCL was charged on 26.7.2021. Therefore, the transmission charges from 19.5.2021 to 25.7.2021 shall be borne by JKPTCL and from 26.7.2021, the transmission charges approved for the transmission asset shall be included in common pool and shall be governed in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

72. To summarize, AFC allowed in respect of the transmission asset for 2019-24 tariff period in this order are as follows:

Particulars	₹ in lakh		
	2021-22	2022-23	2023-24
AFC	121.40	164.28	173.79

73. The Annexure to this order forms part of the order.

74. This order disposes of Petition No. 32/TT/2023 in terms of the above findings and discussions.

sd/-
(Arun Goyal)
Member

sd/-
(Jishnu Barua)
Chairperson



Annexure

Capital Expenditure	Admitted Capital Cost as on COD	Projected ACE			Admitted Capital Cost as on 31.3.2024	Depreciation Rate (%)	Annual Depreciation		
		2021-22	2022-23	2023-24			2021-22	2022-23	2023-24
		(₹ in lakh)	(₹ in lakh)	(₹ in lakh)			(₹ in lakh)	(₹ in lakh)	(₹ in lakh)
Building	0.00	0.00	0.00	0.00	3.34	0.00	0.00	0.00	
Substation	398.36	189.25	119.96	707.58	5.28	26.03	34.19	37.36	
PLCC	0.00	0.00	0.00	0.00	6.33	0.00	0.00	0.00	
IT Equipment	60.63	0.13	10.35	71.11	15.00	9.10	9.89	10.67	
Total	458.99	189.38	130.31	778.68		35.13	44.08	48.03	
					Average Gross Block	553.68	713.53	778.68	
					WAROD (%)	6.35	6.18	6.17	



G.D. Apte & Co.
Chartered Accountants

Certificate

This is certify that we have verified 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 of "02 Nos 220 KV Line Bays at Samba substation under Northern Region System Strengthening – XLII", which is under commercial operation w.e.f. 19.05.2021, is detailed as under:

(Rs. in Lakhs)

S/N	Particulars	Capital Cost	IEDC	IDC	Total
1	Expenditure up to 18.05.2021 (up to DOCO)	369.06	90.54	3.70	463.30
2	Expenditure from 19.05.2021 to 31.03.2022	200.66	0.00	0.00	200.66
3	Expenditure from 01.04.2022 to 31.03.2023	75.62	0.00	0.00	75.62
4	Expenditure from 01.04.2023 to 31.03.2024	28.65	0.00	0.00	28.65
5	Estimated Expenditure from 01.04.2024 to 31.05.2024	0.00	0.00	0.00	0.00
6	Estimated Expenditure from 01.06.2024 to 31.03.2025	3.37	0.00	0.00	3.37
	Total	677.35	90.54	3.70	771.60

We certify that we have verified the expenditure up to 31.03.2024 as referred above on the basis of the information drawn from the audited Statement of Accounts of Power Grid Corporation of India Ltd. of Northern Region - II as on 31.03.2024.

The estimated expenditure is based on the Management estimate.

For G.D. Apte & Co.
Chartered Accountant
Firm Registration Number: 100 515W
UDIN: 24113053BKBFKT6740




Umesh S. Abhyankar
Partner
Membership Number: 113053
Jammu, July 17, 2024



Certificate

This is to certify that we have verified 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 of “02 Nos 220 KV Line Bays at Samba substation under Northern Region System Strengthening – XLII”, which is under commercial operation w.e.f. 19.05.2021, is detailed as under:

(Rs. in Lakhs)

S/N	Particulars	Free hold Land	Leas ehold Land	Build ing and Civil Work s	Tr. Line	Sub Station	OPG W	Commu nication system (excl. OPGW)	IT Equipment incl. software, UNMS, URTDSM, EMS, Cyber Security System, REMC, WAMS, SCADA System	Batt eries	Total
1	Expenditure up to 18.05.2021 (up to DOCO)	0.00	0.00	0.00	0.00	402.24	0.00	0.00	61.06	0.00	463.30
2	Expenditure from 19.05.2021 to 31.03.2022	0.00	0.00	0.00	0.00	200.66	0.00	0.00	0.00	0.00	200.66
3	Expenditure from 01.04.2022 to 31.03.2023	0.00	0.00	0.00	0.00	75.62	0.00	0.00	0.00	0.00	75.62
4	Expenditure from 01.04.2023 to 31.03.2024	0.00	0.00	0.00	0.00	18.30	0.00	0.00	10.35	0.00	28.65
5	Estimated Expenditure from 01.04.2024 to 31.05.2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	Estimated Expenditure from 01.06.2024 to 31.03.2025	0.00	0.00	0.00	0.00	3.37	0.00	0.00	0.00	0.00	3.37
	Total	0.00	0.00	0.00	0.00	700.19	0.00	0.00	71.41	0.00	771.60



Pune Office: GDA House, Plot No. 85, Right Bhusari Colony, Paud Road, Kothrud, Pune 411 038. Phone: 020-46807100, Email: audit@gdaca.com

Mumbai Office: D-509 Neelkanth Business Park, Nathani Road, Vidyavihar (West) Mumbai 400086, Phone-022-3512 3184

S/N	Particulars	Sub-station
1	Total Cost (Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of Civil works for the purpose of Initial Spares)	677.35
2	Initial Spares included above	56.65

We certify that we have verified the expenditure up to 31.03.2024 as referred above on the basis of the information drawn from the audited Statement of Accounts of Power Grid Corporation of India Ltd. of Northern Region - II as on 31.03.2024.

The estimated expenditure is based on Management estimate.

For G.D. Apte & Co.
Chartered Accountants
Firm Registration Number: 100 515W
UDIN: 24113053BKBFKT6740




Umesh S. Abhyankar
Partner
Membership Number: 113053
Jammu, July 17, 2024





भारत सरकार/Govt. of India
विद्युत मंत्रालय/Ministry of Power
केन्द्रीय विद्युत प्राधिकरण/Central Electricity Authority
मुख्य विद्युत निरीक्षणालय प्रभाग/Chief Electrical Inspectorate

CEI/2/EI/RIO (N)/Insp./2023/ 684

Dated: 11.12.2023

Extension of Approval for Energisation

(Under Regulation 32 of CEA (Measures relating to Safety and Electric Supply), Regulations, 2023)

Sh. Tawinder,
Chief Manager, PGCIL,
VPO Jatwal, Samba
Jammu

Subject: Extension of Approval for Energisation of Electrical Installations as mentioned in List of Equipments in application at PGCIL, Samba (attached at Annexure) under Regulation 32 of Central Electricity Authority (Measures relating to Safety and Electrical Supply) Regulations, 2023.

Ref.:

1. Online Application C/2023/06507 dated 14.11.2023.

Whereas the **Electrical Installations as mentioned in List of Equipments in applications of PGCIL, Samba** was inspected by the undersigned on 09.12.2023 under Regulation 32 of the Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2023.

Approval for Energisation of the said electrical installation (Details being enclosed as Annexure) is hereby extended subject to following conditions:

1. M/s PGCIL, Samba shall ensure to have all other requisite clearances/NOCs from other authorities, as applicable.
2. Adherence to relevant provisions of the Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2023 shall be ensured by M/s PGCIL, Samba for safety during operation and maintenance.

The subsequent periodic inspection of above installation/apparatus/transmission line under Regulation 32 of CEA (Measures relating to safety and Electric Supply) Regulations, 2023 shall be carried out at an interval not exceeding 05 years from the date of this inspection. This periodicity is subject to change by government notification.

Bhanu
 11/12/2023
 (राहुल सिंह)

उप निदेशक, (मुख्य विद्युत निरीक्षणालय प्रभाग)

प्रति :

निदेशक, RIO (N), के. वि. प्रा. I


एनआरपीसी परिसर, कटवारिया सराय, नई दिल्ली 110016 टेली: 011-26565214 ईमेल: cea-eidivision@gov.in वेबसाइट: www.cea.nic.in
 NRPC Complex, Katwaria Sarai, New Delhi-110016 Tele-011-26565214 Email- cea-eidivision@gov.in Website- www.cea.nic.in

Electrical Equipments List - 400/220 kV Samba Sub-Station

400 KV BAYS

S.N.	Bay No.	Bay Name	Equipment Details	Phase	Rating	Make/Model	S.No.	Qty.
1	401	400KV Samba-Kishenpur1 Main Bay	LA	R	336 KV	CGL	127488	3
				Y			127484	
				B			127485	
			ISOLATOR	R,Y,B (89A)	420 KV	SIEMENS	C0017-4-2F1, C0017-4-2M, C0017-4-2F2	
				R,Y,B (89B)			C0017-3-14F1, C0017-3-14M, C0017-3-14F2	
				R,Y,B (89L)			C0017-3-17F1, C0017-3-17M, C0017-3-17F2	
			CVT	R	420 KV	CGL	45213	
				Y			45214	
				B			45217	
			CT	R	420 KV	CGL	45184	
				Y			45185	
				B			45186	
CB	R,Y,B	420 KV	SIEMENS	2013/IND/10/11610	1-set			
	Earth Switch	R,Y,B (89AE1)	420 KV	SIEMENS	C0017-4-2F1 ES1, C0017-4-2M ES1, C0017-4-2F2 ES1			
R,Y,B (89AE2)		C0017-4-2F1 ES2, C0017-4-2M ES2, C0017-4-2F2 ES2						
R,Y,B (89BE)		C0017-3-14F1, C0017-3-14M, C0017-3-14F2						
R,Y,B (89LE)		C0017-3-17F1, C0017-3-17M, C0017-3-17F2						
WAVE TRAP	Y	420 KV	BPL	P13A9518	1			
	R	420 KV	CGL	45193				
	Y			45194				




 RAHUL SINGH / RAHUL SINGH
 Deputy Director
 उप निदेशक/Deputy Director
 केन्द्रीय विद्युत प्राधिकरण/C.E.A.
 Ministry of Power
 भारत सरकार / Govt. of India
 New Delhi-66

2	402	400KV kishanpur 1 ICT 1 Tie Bay	B	420 KV	SIEMENS	4519S		1-set		
						CB	R,Y,B		2012/IND/01/9578	
						ISOLATOR	R,Y,B (89A)		C0017-3-3F1, C0017-3-3M C0017-3-3F2	3
							R,Y,B (89B)		C0017-3-8F1, C0017- 3-8M, C0017-3-3F2	
						Earth Switch	R,Y,B (89AE)		C0017-3-3F1, C0017-3-3M, C0017-3-3F2	2
							R,Y,B (89BE)		C0017-3-18F1, C0017-3-18M, C0017-3-18F2	
						LA	R		127475	3
							Y		127476	
							B		127477	
						ISOLATOR	R,Y,B (89A)		C0017-3-18F1, C0017-3-18M C0017-3-18F2	3
							R,Y,B (89B)		C0017-4-1F1, C0017- 4-1M, C0017-4-1F2	
							R,Y,B (89T)		C0017-3-20F1, C0017-3-20M, C0017-3-20F2	
CB	R,Y,B	2012/IND/01/9583	1-set							
CT	R	45202	3							
	Y	45204								
	B	45205								
Earth Switch	R,Y,B (89AE)	C0017-3-18F1, C0017-3-18M, C0017-3-18F2	4							
	R,Y,B (89BE1)	C0017-4-1F1 ES1, C0017-4-1M ES1, C0017-4-1F2 ES1								
	R,Y,B (89BE2)	C0017-4-1F1 ES2, C0017-4-1M ES2, C0017-4-1F2 ES2								
	R,Y,B (89TE)	C0017-3-20F1, C0017-3-20M, C0017-3-20F2								
ICT-1		315 MVA (3 phase Auto.)	1							
LA	R	127472	3							
	Y	127473								
	B	127474								
ISOLATOR	R,Y,B (89A)	C0017-3-6F1, C0017-3-6M C0017-3-3F2	3							
	R,Y,B (89B)	C0017-3-10F1, C0017-3-10M, C0017- 3-10F2								

3
 RAHUL SINGH
 Deputy Director
 Govt. of India
 New Delhi-60



4	404	400KV Kishanpur 2 Main Bay	CVT	R,Y,B (89L)	420 KV	CGL	C0017-3-2F1, C0017-3-2M, C0017-3-2F2	3
				R			S-45219	
				Y			S-45220	
			CT	B	S-45221	3		
				R	45190			
				Y	45191			
			CB	B	45192	1-set		
				R,Y,B	2013/IND/10/11611			
				R,Y,B (89AE)	C0017-3-10F1, C0017-3-3M, C0017-3-3F2			
			Earth Switch	R,Y,B (89BE)	420 KV	SIEMENS	3	
				R,Y,B (89LE)	420 KV	SIEMENS	C0017-3-6F1, C0017-3-6M, C0017-3-6F2	
Y	C0017-3-2F1, C0017-3-2M, C0017-3-2F2							
WAVETRIP	P13A9519	1						
CT	R	420 KV	CGL	3				
	Y	45196						
	B	45197						
CB	R,Y,B	420 KV	SIEMENS	1-set				
	R,Y,B (89A)	420 KV	SIEMENS	2012/IND/01/9579				
	R,Y,B (89B)			C0017-3-9F1, C0017-3-9M C0017-3-9F2				
R,Y,B (89AE)	C0017-3-5F1, C0017-3-5M, C0017-3-5F2							
Earth Switch	R,Y,B (89BE)	420 KV	SIEMENS	2				
	R	420 KV	SIEMENS	C0017-3-19F1, C0017-3-19M, C0017-3-19F2				
	Y			C0017-3-5F1, C0017-3-5M, C0017-3-5F2				
B	127478							
LA	R	336 KV	CGL	3				
	Y				127479			
	B				127480			
ISOLATOR	R,Y,B (89A)	420 KV	SIEMENS	3				
	R,Y,B (89B)				C0017-3-13F1, C0017-3-13M C0017-3-132			
	R,Y,B (89LE)				C0017-3-11F1, C0017-3-11M, C0017-3-11F2			
ISOLATOR	R,Y,B (89R)	420 KV	SIEMENS	3				
	R,Y,B (89S)	420 KV	SIEMENS	C0017-3-12F1, C0017-3-12M, C0017-3-12F2				
	R,Y,B (89T)							

[Handwritten signature]

05/08/2019
 Mr. Ravi Kumar Singh
 Sr. Engineer
 New C. Block
 P. O. Box No. 100
 Sector 10
 Gurgaon
 Haryana
 India
 122002



6	406	400 KV Bus reactor Main Bay	CB	R,Y,B	420 KV	SIEMENS	2012/IND/01/9582	1-set
			CT	R Y B	420 KV	CGL	45199 45200 45201	3
			Earth Switch	R,Y,B (89AE) R,Y,B (89BE) R,Y,B (89RE)	420 KV	SIEMENS	C0017-3-13F1, C0017-3-13M, C0017-3-13F2 C0017-3-11F1, C0017-3-11M, C0017-3-11F2 C0017-3-12F1, C0017-3-12M, C0017-3-12F2	3
			BUS REACTOR		80 MVAR	SIEMENS	130058/1	1
			LA	R Y B	336 KV	CGL	SZ015-2728 SZ015-2948 SZ015-2941	3
			ISOLATOR	R,Y,B (89A) R,Y,B (89B) R,Y,B (89L)	420 KV	SIEMENS	C0017-3-4 F1, C0017-3-4 M, C0017-3-4 F2 C0075-1-20, C0075-1-20, C0075-1-20 G0075-1-13, G0075-1-13, G0075-1-13	3
			CVT	R Y B	420 KV	CGL	SH61650 SH61649 SH61648	3
			CT	R Y B	420 KV	CGL	61631 61630 61629	3
			CB	R,Y,B	420 KV	CGL	48192C	1-set
			Earth Switch	R,Y,B (89AE) R,Y,B (89BE) R,Y,B (89LE)	420 KV	SIEMENS	C0017-3-4 F1, C0017-3-4 M, C0017-3-4 F2 C0075-1-20, C0075-1-20, C0075-1-20 G0075-1-13, G0075-1-13, G0075-1-13	3
			WAVETRIP	R,B R	420 KV	ALSTOM	37993005290(R) 37993005294(B) 45187	2


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 Deputy Director
 Director / C.E.A.
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 New Delhi-66
 400KV Jalandhar 1
 Main Bay



8	408	400KV Jalandhar 1 ICT 2 Tie Bay	CT	Y	420 KV	CGL	45188	3
				B			45189	
			CB	R,Y,B	420 KV	SIEMENS	2012/IND/1/9580	1-set
				R,Y,B (89A)			C0017-3-15F1, C0017-3-15M C0017-3-15F2	
			ISOLATOR	R,Y,B (89B)	420 KV	SIEMENS	C0017-3-1F1, C0017-3-13M, C0017-3-13F2	2
				R,Y,B (89AE)	420 KV	SIEMENS	C0017-3-15F1, C0017-3-15M C0017-3-15F2	
Earth Switch	R,Y,B (89BE)	420 KV	SIEMENS	C0017-3-1F1, C0017-3-13M, C0017-3-13F2	2			
	R			127486				
	LA	Y	336 KV	CGL		127482		
			ISOLATOR	B	420 KV	SIEMENS	127481	3
				R,Y,B (89A)			C0017-3-7F1, C0017-3-7M C0017-3-7F2	
				R,Y,B (89B)			C0017-3-16F1, C0017-3-16M, C0017-3-16F2	
				R,Y,B (89T)			C0017-3-9F1, C0017-3-9M, C0017-3-9F2	3

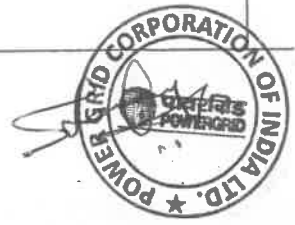

 श्री रवि / RAHUL SINGH
 श्री रवि / Deputy Director
 श्री रवि / Ministry of Power
 श्री रवि / Govt. of India
 श्री रवि / New Delhi-66



9	409	400 KV ICT 2 Main Bay	CB	R,Y,B	420 KV	SIEMENS	2012/IND/01/9581	1-set
			CT	R Y B	420 KV	CGL	45206 45208 45209	3
			Earth Switch	R,Y,B (89AE) R,Y,B (89BE) R,Y,B (89TE)	420 KV	SIEMENS	C0017-3-7F1, C0017-3-7M, C0017-3-7F2 C0017-3-16F1, C0017-3-16M, C0017-3-16F2 C0017-3-9F1, C0017-3-9M, C0017-3-9F2	3
			ICT-2		315 MVA (3 phase Auto.)	ABB	14048/001	1
			LA	R Y B	336 KV	CGL	52015-2940 52015-2933 52015-2939	3
			ISOLATOR	R,Y,B (89A) R,Y,B (89B) R,Y,B (89L)	420 KV	SIEMENS	F0047-1-18, F0047-1-18, F0047-1-18 G0075-1-22, G0075-1-22, G0075-1-22 G0075-1-18, G0075-1-18, G0075-1-18	3
			CVT	R Y B	420 KV	CGL	SH 61647 SH 61660 SH 61645	3
			CT	R Y B	420 KV	CGL	61628 61627 61626	3
			CB	R,Y,B	420 KV	CGL	48191C	1-set
			Earth Switch	R,Y,B (89AE) R,Y,B (89BE) R,Y,B (89LE)	420 KV	SIEMENS	F0047-1-18, F0047-1-18, F0047-1-18 G0075-1-22, G0075-1-22, G0075-1-22 G0075-1-18, G0075-1-18, G0075-1-18	3
			WAVETRIP	R,B	420 KV	ALSTOM	37993005289(R) 37993005302(B)	2
				R			37994009599	


 Mr. Ravi Singh
 Director / DG
 Ministry of Power
 Govt. of India
 New Delhi-110066

400kV Jalandhar 2 Main Bay



11	411	400KV Jalandhar 2 ICT 3 Tie Bay	CT	Y	420 KV	ALSTOM	37994009601	3
			CB	B				37994009602
12	412	400 KV ICT 3 Main Bay	ISOLATOR	R,Y,B (89A)	420 KV	SIEMENS	2015/IND/10/15034	2
				R,Y,B (89B)			F0047-1-14F1, F0047-1-14M, F0047-1-14F2	
				R,Y,B (89T)			F0047-1-15F1, F0047-1-15M, F0047-1-15F2	
			Earth Switch	R,Y,B (89AE)	420 KV	SIEMENS	F0047-1-16F1, F0047-1-16M, F0047-1-16F2	2
				R,Y,B (89BE)			F0047-1-13F1, F0047-1-13M, F0047-1-13F2	
				R			115D	
			LA	Y	336 KV	LAMCO	118D	3
				B			116D	
				R,Y,B (89A)			F0047-1-13F1, F0047-1-13M, F0047-1-13F2	
			ISOLATOR	R,Y,B (89B)	420 KV	SIEMENS	F0047-1-17F1, F0047-1-17M, F0047-1-17F2	3
R,Y,B (89T)				F0047-1-16, F0047-1-16, F0047-1-16				
R,Y,B	420 KV	SIEMENS		2015/IND/10/15035	1-set			
CT	R			37994009597				
	Y	420 KV	ALSTOM	37994009560	3			
	B			37994008938				
Earth Switch	R,Y,B (89AE)			F0047-1-13F1, F0047-1-13M, F0047-1-13F2				
	R,Y,B (89BE)	420 KV	SIEMENS	F0047-1-17F1, F0047-1-17M, F0047-1-17F2	3			
	R,Y,B (89TE)			F0047-1-14, F0047-1-14, F0047-1-14				
LA	ICT-3	315 MVA (3 phase Auto.)	TOSHIBA	90168801	1			
	R			184791,,				
	Y			184788				
	B			211866				
	R	336 KV	CGL	184784	6			
				184785				

[Handwritten Signature]

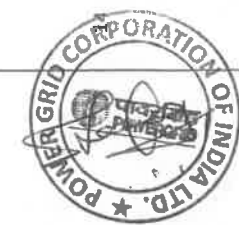
श्री श्री / RAJUL SINGH
 Sr. Engineer / Deputy Director
 Electrical / Ministry of Power
 Govt. of India
 New Delhi-16



		413		414			
ISOLATOR	B					184786	
	R,Y,B (89A)					G0075-1-24, G0075-1-24, G0075-1-24	
	R,Y,B (89B)					G0075-1-26, G0075-1-26, G0075-1-26	4
	R,Y,B (89L)					G0075-1-17, G0075-1-17, G0075-1-17	
CVT	R,Y,B (89R)					G0075-1-16, G0075-1-16, G0075-1-16	
	R	400KV Amargraha 1 Main Bay				SH 61662	
	Y					SH 61661	3
	B					SH 61659	
CT	R					61638	
	Y					61635	3
	B					61642	
Earth Switch	R,Y,B (89AE)					G0075-1-24, G0075-1-24, G0075-1-24	
	R,Y,B (89BE)					G0075-1-26, G0075-1-26, G0075-1-26	4
	R,Y,B (89LE)					G0075-1-17, G0075-1-17, G0075-1-17	
	R,Y,B (89RE)					G0075-1-16, G0075-1-16, G0075-1-16	
CB	R,Y,B				48195C	1-set	
LINE REACTOR	-					Reactor: T-10814/1 NGR : T10815/1	1
WAVETRIP	R,B					109003081320(R) 109003081321(B)	2
CT	R					61636	
	Y					61637	3
	B					61643	
CB	R,Y,B					48193C	1-set
ISOLATOR	R,Y,B (89A)					G0075-1-19, G0075-1-19, G0075-1-19	2
Earth Switch	R,Y,B (89B)					G0075-1-23, G0075-1-23, G0075-1-23	
	R,Y,B (89AE)					G0075-1-19, G0075-1-19, G0075-1-19	2
	R,Y,B (89BE)					G0075-1-23, G0075-1-23, G0075-1-23	

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Handwritten signature and stamp of the Director, Power Grid Corporation of India. The stamp includes the text: 'DIRECTOR, POWER GRID CORPORATION OF INDIA LTD.', 'NEW DELHI', and 'GOVERNMENT OF INDIA'.



17	417	400KV Amargraha 2 Tie Bay	CT	Y	420 KV	CGL	61640	1
				B			61639	
18	418	FUTURE-2	CB	R,Y,B	420 KV	SIEMENS	48194C	1-set
				R,Y,B (89A)				
			ISOLATOR	R,Y,B (89B)	420 KV	SIEMENS	G0075-1-15, G0075-1-15, G0075-1-15	2
				R,Y,B (89AE)			G0075-1-14, G0075-1-14, G0075-1-14	
Earth Switch	R,Y,B (89BE)	420 KV	SIEMENS	G0075-1-15, G0075-1-15, G0075-1-15	2			
	R,Y,B (89B)			G0075-1-9, G0075-1-9, G0075-1-9				
Earth Switch	R,Y,B (89BE)	420 KV	SIEMENS	G0075-1-9, G0075-1-9, G0075-1-9	1			
	R			S-45218				
19	400 KV BUS 1	CVT	Y	420 KV	CGL	S-45216	3	
			B			S-45177		




HONGSINGH
Director
RTE/OD/Supply/C.E.A.
Ministry of Power
Government of India
New Delhi-110001



20	400 KV BUS 2	CVT	R	420 KV	CGL	3
			Y			
			B			

220 KV BAYS

S.N.	Bay No.	Bay Name	Equipment Details	Rating	Make/Model	Qty.	
1	201	FUTURE Line -1	LA	R	OBLUM	60	
				Y		59	
				B		58	
			CB	R,Y,B	CGL	29236C	1-set
				R,Y,B (89A)	SIEMENS	C0017-10-8	4
				R,Y,B (89B)		C0017-9-17F1, C0017-9-17M, C0017-9-17F2	
			R,Y,B (89L)	C0017-13-1			
			ISOLATOR	R,Y,B (89T)	SIEMENS	C0017-9-16 F1, C0017-9-16 M, C0017-9-16 F2	3
				R,Y,B (89AE)		C0017-10-8 ES1	
				R,Y,B (89LE1)		C0017-13-1 ES1	
			Earth Switch	R,Y,B (89LE2)	SIEMENS	C0017-13-1 ES2	3
				R		37400	
Y	37395						
CT	B	CGL+ALSTOM	37394	3			
	R	ALSTOM	37992002615				
	Y		37992002116				
CVT	B		ALSTOM	37992002842	3		
	R	57					
	Y	95057					
LA	B	OBLUM+ CGL	95068	3			


RISHI RISHI / RAHUL SINGH
 Director
 Rishi Rishi / Deputy Director
 Ministry of Power
 Government of India
 New Delhi-110001



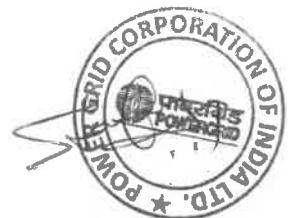
CT	Y	220 KV	CGL	37391	3
	B				
WAVE TRAP	R,B	220 KV	ALSTOM	37392	2
CVT	R	220 KV	CGL	37993004405, 37993004406	3
	Y			S-37461	
	B			S-37465	
LA	R	216 KV	CGL	37436	3
	Y			95063	
	B			95067	
CB	R,Y,B	220 KV	CGL	95058	1-set
	R,Y,B (89A)			29238C	
ISOLATOR	R,Y,B (89B)	220 KV	SIEMENS	C0017-10-9	4
	R,Y,B (89L)			C0017-9-02F1, C0017-9-02M, C0017-9-02F2	
	R,Y,B (89T)			C0017-11-2	
	R,Y,B (89AE)			C0017-9-15 F1, C0017-9-15 M, C0017-9-15 F1	
Earth Switch	R,Y,B (89LE1)	220 KV	SIEMENS	C0017-10-9 ES1	3
	R,Y,B (89LE2)			C0017-11-2 ES1	
	R			C0017-11-2 ES2	
CT	Y	220 KV	CGL	37396	3
	B			37397	
	R,B			37394	
WAVETRIP	R,B	220 KV	ALSTOM	37993004681, 37993004682	2
CVT	R	220 KV	CGL	S-37463	3
	Y			S-37458	
	B			S-37444	
CB	R,Y,B	220 KV	SIEMENS	2012/JND/03/9805	1-set
	R,Y,B (89A)			C0017-10-6	

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220 kv line-4 bay
(Hiranagar-1)

4

SINGH
 Director
 RAHU
 Director
 Deputy
 C.E.
 Ministry of Power
 Govt. of India
 New Delhi-66



Earth Switch	R,Y,B (89AE)	220 KV	SIEMENS	C0017-10-4 ES1	3
	R,Y,B (89LE1)			C0017-11-3 ES1	
	R,Y,B (89LE2)			C0017-11-3 ES2	
CT	R	220 KV	CGL	37398	3
	Y			45231	
	B			45232	
LA	R	216 KV	CGL	127570	3
	Y			127501	
	B			127508	
CB	R,Y,B	220 KV	SIEMENS	2012/IND/03/9809	1-set
	R,Y,B (89A)			C0017-10-5	
ISOLATOR	R,Y,B (89B)	220 KV	SIEMENS	C0017-9-05F1, C0017-9-05M, C0017-9-05F2	4
	R,Y,B (89L)			C0017-11-5	
	R,Y,B (89T)			C0017-9-5 F1, C0017-9-5 M, C0017-9-5 F2	
	R,Y,B (89AE)			C0017-10-5 ES1	
Earth Switch	R,Y,B (89LE1)	220 KV	SIEMENS	C0017-11-5 ES1	3
	R,Y,B (89LE2)			C0017-11-5 ES2	
	R			45233	
CT	Y	220 KV	CGL	45234	3
	B			45235	
	R			S-45263	
CVT	Y	220 KV	CGL	S-45264	3
	B			S-45265	
	R			127509	
LA	Y	216 KV	CGL	127510	3
	B			127511	
	R				

220 KV Line-5 Bay
(Hiranagar-2)

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SINGH
 Director
 R.A.H.U.L. / C.E.A.
 Director
 R.A.H.U.L. / C.E.A.
 Director
 R.A.H.U.L. / C.E.A.
 Director
 R.A.H.U.L. / C.E.A.
 Director
 R.A.H.U.L. / C.E.A.



4.4	4.4.4	10.1.1.1	Earth Switch	R,Y,B (89T)	220 KV	SIEMENS	F0047-2-10 F1, C0017-2-10 M, C0017-2-10 F2	3
				R,Y,B (89AE)			F0017-4-5 ES1	
				R,Y,B (89LE1)			F0047-4-5 ES2	
			CT	R	220 KV	TOSHIBA	F0047-3-5	3
				Y			513072	
				B			513082	
			LA	R	216 KV	LAMCO	853	3
				Y			854	
				B			855	
			CB	R,Y,B	220 KV	SIEMENS	2020 / 30901	1-set
				R,Y,B (89A)			1590A 212-1	
				R,Y,B (89B)			1590A-214-6 R, 1590A-214-6 Y, 1590A-214-6 B	
			ISOLATOR	R,Y,B (89L)	220 KV	S&S	1590A-213-3	4
				R,Y,B (89T)			1590A-214-5 R, 1590A-214-5 Y, 1590A-214-5 B	
				R,Y,B (89AE)			1590A-212-1	
			Earth Switch	R,Y,B (89LE1)	220 KV	S&S	1590A-213-3	3
				R,Y,B (89LE2)			1590A-213-3	
				R			2120660	
			CT	Y	220 KV	ABB	2120661	3
				B			2020662	
				R			2220185	
			CVT	Y	220 KV	ABB	2220186	3
				B			2220187	
				R			S-45259	
			CVT	Y	220 KV	GGL	S-45258	3
				R				
			220 KV Bus-1					


 श्री प्रेम / R.K.H.L. SINGH
 प्रमुख अभियंता / Deputy Director
 वी. प्रभाग / Ministry of Power
 नई दिल्ली / Govt. of India
 30 प्रभाग / New Delhi-110088



15	220 KV Bus-2	CVT	B	220 KV	Siemens	S-45257
			R			2CV5512
			Y			S-45261
			B			S-45260
					3	


 Mr. R.R. RANHU - SINGH
 Sr. Engineer / Deputy Director
 Central Board of Secondary Education
 Ministry of Power, India
 New Delhi-110016



Liability Flow Statement

Name of Petitioner : POWERGRID Corporation of India Ltd.
 Project Name : Northern Region System Strengthening - XLLI
 Name of the Asset: 02 Nos 220 KV Line Bays at Samba sub station
 Actual DOCO: 19.05.2021

Asset No	Party name	Particular's (TL/SS)	Year of Actual Capitalization	Outstanding Liability as on COD	Discharge				Additional Liability Recognized* (Unexecuted works)				Outstanding Liability as on 31.03.2024 (To be discharged during 2024-29)
					2021-22	2022-23	2023-24	Total (19-24)	2021-22	2022-23	2023-24	Total (19-24)	
Asset-1	VIKRAN ENGINEERING AND EXIM PVT LTD	Substation work	2021	145.27	105.81	17.79	18.30	141.90	94.84	57.83	0.00	152.67	3.37
		IT	2021	10.35	0.00	0.00	10.35	10.35	0.00	0.00	0.00	0.00	0.00
	Total			155.62	105.81	17.79	28.65	152.25	94.84	57.83	0.00	152.67	3.37

Asset No	Party name	Particular's (TL/SS)	Year of Actual Capitalization	Outstanding Liability as on 31.03.2024	Discharge				Additional Liability Recognized* (Unexecuted works)				Outstanding Liability as on 31.03.2029
					2024-25	2025-26	2026-27	Total (24-29)	2024-25	2025-26	2026-27	Total (24-29)	
Asset-1	VIKRAN ENGINEERING AND EXIM PVT LTD	Substation work	2021	3.37	3.37	0.00	0.00	3.37	0.00	0.00	0.00	0.00	0.00
	Total			3.37	3.37	0.00	0.00	3.37	0.00	0.00	0.00	0.00	0.00



Statement showing IDC Discharged upto DOCO									
Project :	Northern Region System Strengthening - XLJI								
Element:	02 Nos 220 KV Line Bays at Samba sub station								
DOCO: Actual	19-May-21								
Loans	Amount	Interest Rate	Drawl Date	Total IDC	Annual Interest Payment Date upto DOCO	Interest Discharged upto DOCO	Annual Interest Payment Date after DOCO		
HDFC-02 (2020-2021) (Q3) (21.12.2020)	67.48	Floating	21-Dec-20	1.64	01-May-21	1.44	01-Jun-21	0.20	
HDFC-02 (2020-2021) (Q4) (30.03.2021)	200.00	Floating	30-Mar-21	1.63	01-May-21	1.04	01-Jun-21	0.59	
HDFC-02 (2021-2022) (Q1) (03.04.2021)	56.83	Floating	03-Apr-21	0.43	01-May-21	0.26	01-Jun-21	0.17	
Total	324.31			3.70		2.75		0.96	
Total IDC as per Cost Certificate	3.70								
IDC Discharged upto DOCO	2.75								
Accrual IDC upto DOCO (Discharged during 2021-2022)	0.95								
Accrual IDC upto DOCO (Discharged during 2022-2023)	0.00								
Certified that Interest on HDFC Loan is paid monthly as per terms of Agreement and no default has been made in respect of debt servicing									



Summary of Tariff

Form No. - 1

Encl-6

Name of the Transmission Licensee:	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOC Date	May 19, 2021

Particulars	(Amount in Rs. Lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Year Days	0.00	0.00	365.00	365.00	366.00
Tariff Days	0.00	0.00	317.00	365.00	366.00
Depreciation-Form No. 10A	0.00	0.00	30.48	42.09	45.35
Interest on Loan-Form No. 9E	0.00	0.00	19.26	29.08	30.72
Return on Equity-Form No. 8	0.00	0.00	27.03	38.58	41.52
Int. on Working capital-Form No.11	0.00	0.00	2.60	3.33	4.00
Op. and maintenance-Form No.2	0.00	0.00	41.90	49.92	51.68
Total AFC	0.00	0.00	121.27	163.00	173.27

(Petitioner)



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

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

1. Transmission Lines

(Amount in Rs. Lakh)

Summary:



2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transfomers/ Reactor/ SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition Yes/ No		
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV				
Samba:02 NOS. 220 KV BAYS	Conventional	220 KV				2.000								May 19, 2021	Y

Summary:

O&M Expenses For Substations Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
220KV SUB-STATION					
Normative Rate of O&M as per Regulation	0.00	0.00	24.12	24.96	25.84
No. of Units	0.00	0.00	2.00	2.00	2.00
O&M Claimed	0.00	0.00	41.90	49.92	51.68



3. Communication System

Summary:



Summary of O&M Expenses claim

(Amount in Rs. Lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M					
Transmission Line	0.00	0.00	0.00	0.00	0.00
Substation	0.00	0.00	41.90	49.92	51.68
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	0.00	0.00	41.90	49.92	51.68
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	41.90	49.92	51.68

(Petitioner)



Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOC0 Date	May 19, 2021

(Amount in Rs. Lakh)

Particulars	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Base Rate of Return of Equity (In %)						
Tax Rate (in %)	21.55	17.472	17.472	17.472	17.472	17.472
Effective tax rate (in %)						
Grossed up Rate of ROE (in %)	19.758	18.782	18.782	18.782	18.782	18.782
Target availability - AC System (in %)	98.00	98.00	98.00	98.00	98.00	98.00
Target availability - HVDC System (in %)	96.00	96.00	96.00	96.00	96.00	96.00
Norms for sub-station Bays (Rs Lakh per bay)						
765 kV	96.20	45.01	46.60	48.23	49.93	51.68
400 kV	68.71	32.15	33.28	34.45	35.66	36.91
220 kV	48.10	22.51	23.30	24.12	24.96	25.84
132 kV and below	34.36	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (Rs Lakh per MVA)						
765 kV	0.00	0.491	0.508	0.526	0.545	0.564
400 kV	0.00	0.358	0.371	0.384	0.398	0.411
220 kV	0.00	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.00	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (Rs Lakh per km)						
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.806	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.691	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.461	0.503	0.521	0.536	0.558	0.578



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

(Petitioner)



Statement of Capital cost

Form No. - 4A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCOC Date	May 19, 2021

A) Capital Cost

Particular	(Amount in Rs. Lakh)		
	Accrual Basis	Un-discharged Liabilities	Cash Basis
As on relevant date : 2021-22			
a) Opening Gross Block Amount as per books	618.92	156.57	462.35
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	3.70	0.95	2.75
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	90.54	0.00	90.54

a) Addition in Gross Block Amount during the period	94.85	0.00	94.85
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	713.77	49.81	663.96
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	3.70	0.00	3.70
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	90.54	0.00	90.54

As on relevant date : 2022-23

a) Opening Gross Block Amount as per books	713.77	49.81	663.96
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	3.70	0.00	3.70

c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	90.54	0.00	90.54
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	57.83	0.00	57.83
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	771.60	32.02	739.58
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	3.70	0.00	3.70
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	90.54	0.00	90.54
As on relevant date :2023-24			
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	771.60	32.02	739.58
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	3.70	0.00	3.70
d) De-cap in gross block amount during the year	90.54	0.00	90.54
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	771.60	3.37	768.23
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	3.70	0.00	3.70
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	90.54	0.00	90.54

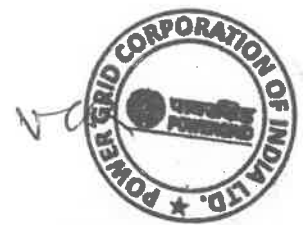


(Amount in Rs. Lakh)

Particular	2021-2022	2022-2023	2023-2024	2024-2025
Opening balance of liability	156.57	49.81	32.02	3.37
			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	0.00
Discharge of liability by payment and claimed as ACE	106.76	17.79	28.65	3.37	0.00	0.00	0.00	0.00	0.00	0.00
Reversal/cancelation (to be entered)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing Balance of Admitted liability	49.81	32.02	3.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(Petitioner)



Financial Package upto COD

Form No. - 6

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOC Date	May 19, 2021

(Amount in Rs. Lakh)

Particulars	Financial Package as Approved		Financial Package as on COD 01/04/2019		As Admitted on COD 01/04/2019	
	Currency	Amount	Currency	Amount	Currency	Amount
Loans		0.00		0.00		0.00
Loan-Domestic		0.00		0.00		0.00
Loan-Foreign		0.00		0.00		0.00
Total Loans	INR	562.80	INR	320.29		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	241.20	INR	137.26		0.00
Total Equity	INR	241.20	INR	137.26		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	804.00	INR	457.55		0.00

Particulars	Debt	Equity	Total
Addcap for 2021 - 2022			189.38
Addcap for 2022 - 2023			75.62
Addcap for 2023 - 2024			28.65



Particulars	Actual	Normative	
Addcap for 2021 - 2022			
Equity		56.81	
Debt		132.57	
Total		189.38	
Addcap for 2022 - 2023			
Equity		22.69	
Debt		52.93	
Total		75.62	
Addcap for 2023 - 2024			
Equity		8.59	
Debt		20.06	
Total		28.65	
Total Capital cost with Addcap		751.20	

(Petitioner)



Statement of Additional Capitalisation after COD

Form No. - 7

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

(Amount in Rs. Lakh)

Particulars	Addition into Gross Block as per books of Account during the year (2)	De-Cap into Gross Block as per books of Account during the year	Less: Deductions dr. the year towards				Add: Discharge of earlier admitted liability	ACE on cash basis for tariff purpose	Admitted Cost in final tariff (Rs Lakh)
			Grants Received (if any) (3)	Asset pertaining to other businesses (If any) (4)	Other Deduction (if any) (5)	Less: Undischarged liability included in (2-4-5)			
ACE for the year :2019-20 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	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)									

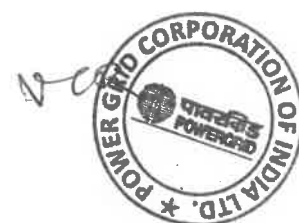


Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	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 :2021-22 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	94.85	0.00	0.00	0.00	12.23	0.00	106.63	189.25	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	0.13	0.13	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	94.85	0.00	0.00	0.00	12.23	0.00	106.76	189.38	0.00
ACE for the year :2022-23 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	57.83	0.00	0.00	0.00	0.00	0.00	17.79	75.62	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	57.83	0.00	0.00	0.00	0.00	0.00	17.79	75.62	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	0.00	0.00	0.00	0.00	0.00	0.00	18.30	18.30	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	10.35	10.35	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	28.65	28.65	0.00

(Petitioner)



Financing of Additional Capitalisation

Form No. - 7A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLI I		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

	Actual/Projected					Admitted			
	2019-20	2020-21	2021-22	2022-23	2023-24	2020-21	2021-22	2022-23	2023-24
Financial Year (Starting of COD)									
Amount capitalized in Work/ Equipment									
Financing Details									
Total Loan	0.00	0.00	132.57	52.93	20.06				
Total	0.00	0.00	189.38	75.62	28.65				



(Petitioner)

Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

Particulars	(Amount in Rs. Lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the year	0.00	0.00	365.00	365.00	366.00
No. of days for which tariff claimed	0.00	0.00	317.00	365.00	366.00
Opening Normative Equity	0.00	0.00	137.26	194.07	216.76
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	137.26	194.07	216.76
Add: Increase in Equity due to addition during the year / period	0.00	0.00	24.78	17.35	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	0.00	32.03	5.34	8.59
Closing Normative Equity	0.00	0.00	194.07	216.76	225.35
Average Normative Equity	0.00	0.00	165.67	205.42	221.06
Rate of return on Equity (%)	0.00	0.00	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	0.00	0.00	15.50	15.50	15.50
MAT/Corporate Rate	0.00	0.00	17.472	17.472	17.472
Grossed up rate of ROE	0.00	0.00	18.782	18.782	18.782
Return on Equity	0.00	0.00	31.12	38.58	41.52
Pro rata return on Equity	0.00	0.00	27.03	38.58	41.52



(Petitioner)

Calculation of WAR of interest on actual loan

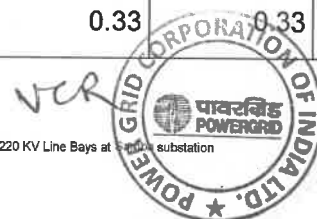
Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
SBI-04 -ADD-CAP					
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	1.04
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	11.06
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	1.11
Net Loan-Closing	0.00	0.00	0.00	0.00	9.95
Average Net Loan	0.00	0.00	0.00	0.00	4.98
Rate of Interest on Loan on Annual Basis	0.00	0.00	6.65	7.225616	8.126549
Interest on loan	0.00	0.00	0.00	0.00	0.4047

HDFC (Rs.5000 Cr.) -ACCRUAL IDC					
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Loan- Opening	0.00	0.00	0.00	0.67	0.67
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.34	0.34
Net loan-Opening	0.00	0.00	0.00	0.33	0.33
Add: Drawl(s) during the year	0.00	0.00	0.67	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.34	0.00	0.00
Net Loan-Closing	0.00	0.00	0.33	0.33	0.33



Average Net Loan	0.00	0.00	0.17	0.33	0.33
Rate of Interest on Loan on Annual Basis	0.00	0.00	5.95	7.315205	8.10
Interest on loan	0.00	0.00	0.0101	0.0241	0.0267

HDFC (Rs.5000 Cr.) -DOCO FUNDING					
Gross Loan- Opening	0.00	0.00	323.64	323.64	323.64
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	163.51	163.51
Net loan-Opening	0.00	0.00	323.64	160.13	160.13
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	163.51	0.00	0.00
Net Loan-Closing	0.00	0.00	160.13	160.13	160.13
Average Net Loan	0.00	0.00	241.89	160.13	160.13
Rate of Interest on Loan on Annual Basis	0.00	0.00	5.95	7.315205	8.10
Interest on loan	0.00	0.00	14.3925	11.7138	12.9705

BOND LXIX (69) -ADD CAP FUNDING					
Gross Loan- Opening	0.00	0.00	0.00	140.46	140.46
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	140.46	140.46
Add: Drawl(s) during the year	0.00	0.00	140.46	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	140.46	140.46	140.46
Average Net Loan	0.00	0.00	70.23	140.46	140.46
Rate of Interest on Loan on Annual Basis	0.00	0.00	6.05	6.05	6.05
Interest on loan	0.00	0.00	4.248	8.4978	8.4978



Canara-01 -ADD-CAP

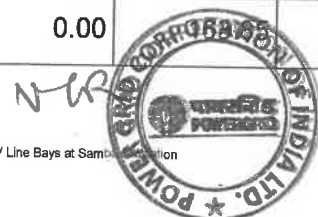
Gross Loan- Opening	0.00	0.00	0.00	0.00	52.93
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	0.00	0.00	0.00	52.93
Add: Drawl(s) during the year	0.00	0.00	0.00	52.93	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	5.29
Net Loan-Closing	0.00	0.00	0.00	52.93	47.64
Average Net Loan	0.00	0.00	0.00	26.47	50.29
Rate of Interest on Loan on Annual Basis	0.00	0.00	8.15	7.634924	8.15
Interest on loan	0.00	0.00	0.00	2.021	4.0986

Bond LXXV (75) -ADD-CAP

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	9.00
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	9.00
Average Net Loan	0.00	0.00	0.00	0.00	4.50
Rate of Interest on Loan on Annual Basis	0.00	0.00	7.65	7.65	7.65
Interest on loan	0.00	0.00	0.00	0.00	0.3443

Summary

Gross Loan- Opening	0.00	0.00	323.64	464.77	517.70
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00		164.89



Net loan-Opening	0.00	0.00	323.64	300.92	353.85
Add: Drawl(s) during the year	0.00	0.00	141.13	52.93	20.06
Less: Repayment(s) of loan during the year	0.00	0.00	163.85	0.00	6.40
Net Loan-Closing	0.00	0.00	300.92	353.85	367.51
Average Net Loan	0.00	0.00	312.29	327.39	360.69
Rate of Interest on Loan on Annual Basis	0.00	0.00	5.9725	6.7982	7.3034
Interest on loan	0.00	0.00	18.6515	22.2567	26.3426

(Petitioner)



Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

Particulars	(Amount in Rs. Lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the Year	0.00	0.00	365.00	365.00	366.00
No. of days for which Tariff claimed	0.00	0.00	317.00	365.00	366.00
Gross normative loan-Opening	0.00	0.00	320.29	452.86	505.79
Cumulative repayments of Normative loan upto previous year	0.00	0.00	0.00	30.48	72.57
Net normative loan-Opening	0.00	0.00	320.29	422.38	433.22
Addition in normative loan towards the ACE	0.00	0.00	132.57	52.93	20.06
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	30.48	42.09	45.35
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	422.38	433.22	407.93
Average normative loan	0.00	0.00	371.34	427.80	420.58
Weighted Average Rate of interest on actual loan	0.00	0.00	5.9725	6.7982	7.3034
Interest on normative loan	0.00	0.00	22.18	29.08	30.72
Pro rata interest on normative loan	0.00	0.00	19.26	29.08	30.72

(Petitioner)



Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOC Date	May 19, 2021

(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
2021-22						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	396.62	189.25	585.87	491.25	5.28	22.53
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	60.93	0.13	61.06	61.00	15.00	7.95
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	457.55	189.38	646.93	552.25	0.00	30.48
Weighted Average Rate of Depreciation(%)					5.519239	

2022-23						
Land(Freehold)	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	585.87	75.62	661.49	623.68	5.28	32.93
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	61.06	0.00	61.06	61.06	15.00	9.16
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	646.93	75.62	722.55	684.74	0.00	42.09
Weighted Average Rate of Depreciation(%)					6.146859	

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	661.49	18.30	679.79	670.64	5.28	35.41
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	61.06	10.35	71.41	66.24	15.00	9.94
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	722.55	28.65	751.20	736.88	0.00	45.35
Weighted Average Rate of Depreciation(%)					6.154326	



Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOC0 Date	May 19, 2021

(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	365.00	365.00	366.00
No of days for which tariff claimed	0.00	0.00	317.00	365.00	366.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/ Project	0.00	0.00	23.00	23.00	23.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	0.00	0.00	0.00	1.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	0.00	23.00	23.00	22.00
Capital Base					
1.4 Opening capital cost	0.00	0.00	457.55	646.93	722.55
1.5 Additional Capital Expenditure dr. the year	0.00	0.00	189.38	75.62	28.65
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	646.93	722.55	751.20
1.8 Average capital cost	0.00	0.00	552.25	684.74	736.88
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	61.00	61.06	66.24
1.11 Asset having 10% salvage value included in 1.8	0.00	0.00	491.25	623.68	670.64
1.12 Depreciable Value(1.10+90% of 1.11)	0.00	0.00	503.13	622.37	669.82
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	0.00	0.00	5.519239	6.140632	6.154326



1.14 Depreciation(for the period)	0.00	0.00	30.48	42.09	45.35
1.15 Depreciation(Annualised)	0.00	0.00	30.48	42.09	45.35
1.16 Cumulative depreciation at the beginning of the period	0.00	0.00	0.00	30.48	72.57
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	30.48	72.57	117.92
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00

(Petitioner)



Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

Particulars	(Amount in Rs. Lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	0.00	0.00	365.00	365.00	366.00
No of days for which tariff claimed	0.00	0.00	317.00	365.00	366.00
O&M Expenses-one month	0.00	0.00	4.02	4.16	4.31
Maintenance spares 15% of O&M Expenses	0.00	0.00	7.24	7.49	7.75
Receivables equivalent to 45 days of AFC	0.00	0.00	17.21	20.10	21.30
Total Working capital	0.00	0.00	28.47	31.75	33.36
Bank Rate as on 01.04.2019 or as on 01st April of the COD year, whichever is later.	0.00	0.00	10.50	10.50	12.00
Interest on working capital	0.00	0.00	2.99	3.33	4.00
Pro rata interest on working capital	0.00	0.00	2.60	3.33	4.00

(Petitioner)

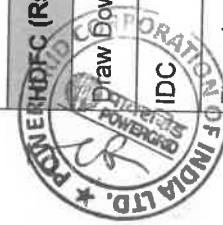


Drawdown schedule Calculation of IDC & Financing Charges

Form No. - 12B

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

Particulars	Quarter 1		Quarter 2		Quarter n (COD)	
	Quantum in FC	Ex. Rate on Drawn Down Date	Quantum in FC	Ex. Rate on Drawn Down Date	Quantum in FC	Ex. Rate on Drawn Down Date
	Amount in Indian Rupee	Amount in Indian Rupee	Amount in Indian Rupee	Amount in Indian Rupee	Amount in Indian Rupee	Amount in Indian Rupee
Loans						
Foreign Loans						
Total of Foreign Loans						
Indian Loans						
IndFC (Rs.5000 Cr.) -DOCO FUNDING						
Draw Down Account						323.64
IDC						
Financing Charges						



Summary of Tariff

Form No. - 1

Encl-7

Name of the Transmission Licensee:	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

Particulars	(Amount in Rs. Lakh)				
	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	46.69	46.78	46.78	46.78	37.59
Interest on Loan-Form No. 9E	28.19	24.82	22.21	19.97	16.56
Return on Equity-Form No. 8	42.42	42.51	42.51	42.51	42.51
Int. on Working capital-Form No.11	3.53	3.57	3.63	3.70	3.62
Op. and maintenance-Form No.2	41.34	43.50	45.80	48.20	50.72
Total AFC	162.17	161.18	160.93	161.16	151.00

(Petitioner)



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

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLI		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

1. Transmission Lines

Summary:

(Amount in Rs. Lakh)



2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transfomers/ Reactor/ SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition Yes/ No	
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV			
Samba:02 NOS. 220 KV BAYS	Conventional	220 KV				2.000							May 19, 2021	Y

Summary:

O&M Expenses For Substations Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
220KV SUB-STATION					
Normative Rate of O&M as per Regulation	20.67	21.75	22.90	24.10	25.36
No. of Units	2.00	2.00	2.00	2.00	2.00
O&M Claimed	41.34	43.50	45.80	48.20	50.72



3. Communication System

Summary:



Summary of O&M Expenses claim

(Amount in Rs. Lakh)

Particular	2024-25	2025-26	2026-27	2027-28	2028-29
A) Normative O&M					
Transmission Line	0.00	0.00	0.00	0.00	0.00
Substation	41.34	43.50	45.80	48.20	50.72
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	41.34	43.50	45.80	48.20	50.72
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	41.34	43.50	45.80	48.20	50.72

(Petitioner)



Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

(Amount in Rs. Lakh)

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



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

(Petitioner)



Statement of Capital cost

Form No. - 4A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

A) Capital Cost

(Amount in Rs. Lakh)

Particular	Accrual Basis	Un-discharged Liabilities	Cash Basis
As on relevant date :2024-25			
a) Opening Gross Block Amount as per books	771.60	3.37	768.23
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	3.70	0.00	3.70
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	90.54	0.00	90.54

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
Net capex in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	771.60	0.00	771.60
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	3.70	0.00	3.70
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	90.54	0.00	90.54

As on relevant date :2025-26

a) Opening Gross Block Amount as per books	771.60	0.00	771.60
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	3.70	0.00	3.70



c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	90.54	0.00	90.54
a) Addition in Gross Block Amount during the period			
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00
a) Closing Gross Block Amount as per books			
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	771.60	0.00	771.60
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	3.70	0.00	3.70
	90.54	0.00	90.54
As on relevant date :2026-27			
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	771.60	0.00	771.60
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	3.70	0.00	3.70
	90.54	0.00	90.54
a) Addition in Gross Block Amount during the period			
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00
a) Closing Gross Block Amount as per books			
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	771.60	0.00	771.60
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	3.70	0.00	3.70
	90.54	0.00	90.54



As on relevant date :2027-28			
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	771.60	0.00	771.60
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	3.70	0.00	3.70
	90.54	0.00	90.54

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	771.60	0.00	771.60
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	3.70	0.00	3.70
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	90.54	0.00	90.54

As on relevant date :2028-29

a) Opening Gross Block Amount as per books	771.60	0.00	771.60
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	3.70	0.00	3.70
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	90.54	0.00	90.54

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	771.60	0.00	771.60
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	3.70	0.00	3.70
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	90.54	0.00	90.54



Flow of liability for the Asset

(Amount in Rs. Lakh)

Particular	2024-2025					
Opening balance of liability	3.37	0.00	0.00	0.00	0.00	0.00
Add: Liability from ACE	0.00	0.00	0.00	0.00	0.00	0.00

Discharge of liability by payment and claimed as ACE	3.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversal/cancelation (to be entered)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing Balance of Admitted liability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(Petitioner)



Financial Package upto COD

Form No. - 6

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

(Amount in Rs. Lakh)

Particulars	Financial Package as Approved		Financial Package as on COD 01/04/2024		As Admitted on COD 01/04/2024	
	Currency	Amount	Currency	Amount	Currency	Amount
Loans		0.00		0.00		0.00
Loan-Domestic		0.00		0.00		0.00
Loan-Foreign		0.00		0.00		0.00
Total Loans	INR	562.80	INR	525.85		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	241.20	INR	225.35		0.00
Total Equity	INR	241.20	INR	225.35		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	804.00	INR	751.20		0.00

Particulars	Debt	Equity	Total
Addcap for 2024 - 2025			3.37
Addcap for 2025 - 2026			0.00
Addcap for 2026 - 2027			0.00
Addcap for 2027 - 2028		131	0.00



Addcap for 2028 - 2029			0.00	
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Particulars	Actual	Normative	
Addcap for 2024 - 2025			
Equity		1.01	
Debt		2.36	
Total		3.37	
Addcap for 2025 - 2026			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2026 - 2027			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2027 - 2028			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2028 - 2029			
Equity		0.00	
Debt		0.00	
Total		0.00	
Total Capital cost with Addcap		754.57	



Statement of Additional Capitalisation after COD

Form No. - 7

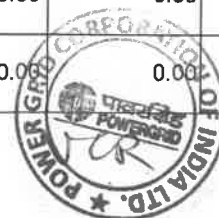
Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

(Amount in Rs. Lakh)

Particulars	Addition into Gross Block as per books of Account during the year (2)	De-Cap into Gross Block as per books of Account during the year	Less: Deductions dr. the year towards				Add: Discharge of earlier admitted liability	ACE on cash basis for tariff purpose	Admitted Cost in final tariff (Rs Lakh)
			Grants Received (if any) (3)	Asset pertaining to other businesses (If any) (4)	Other Deduction (if any) (5)	Less: Undischarged liability included in (2-4-5)			
ACE for the year :2024-25 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	3.37	3.37	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	3.37	3.37	0.00
ACE for the year :2025-26 (Actual/Projected)									



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



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

(Petitioner)



Financing of Additional Capitalisation

Form No. - 7A

Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	Northern Region System Strengthening – XLII	
Element Description	02 Nos 220 KV Line Bays at Samba substation	
Region	Northern Region	DOC Date May 19, 2021

(Amount in Rs. Lakh)

Financial Year (Starting of COD)	Actual/Projected				Admitted					
	2024-25	2025-26	2026-27	2027-28	2028-29	2024-25	2025-26	2026-27	2027-28	2028-29
Amount capitalized in Work/ Equipment										
Financing Details										
Total Loan	2.36	0.00	0.00	0.00	0.00					
	1.01	0.00	0.00	0.00	0.00					
Total	3.37	0.00	0.00	0.00	0.00					



(Petitioner)

Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOC Date	May 19, 2021

(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	225.35	226.36	226.36	226.36	226.36
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)	225.35	226.36	226.36	226.36	226.36
Add: Increase in Equity due to addition during the year / period	0.00	0.00	0.00	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	1.01	0.00	0.00	0.00	0.00
Closing Normative Equity	226.36	226.36	226.36	226.36	226.36
Average Normative Equity	225.86	226.36	226.36	226.36	226.36
Rate of return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Reduced rate of 1% decided by commission under Regulation 30(2) (if any)	0.00	0.00	0.00	0.00	0.00
Effective rate of ROE	15.50	15.50	15.50	15.50	15.50
MAT/Corporate Rate	17.472	17.472	17.472	17.472	17.472
Grossed up rate of ROE	18.782	18.782	18.782	18.782	18.782
Pro rata return on Equity	42.42	42.51	42.51	42.51	42.51
Return on Equity	42.42	42.51	42.51	42.51	42.51



Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
SBI-04 -ADD-CAP					
Gross Loan- Opening	11.06	11.06	11.06	11.06	11.06
Cumulative repayments of Loans upto previous year	2.15	3.26	4.36	5.47	6.57
Net loan-Opening	8.91	7.80	6.70	5.59	4.49
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	1.11	1.11	1.11	1.11	1.11
Net Loan-Closing	7.80	6.69	5.59	4.48	3.38
Average Net Loan	8.36	7.25	6.15	5.04	3.94
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.6855	0.5945	0.5043	0.4133	0.3231

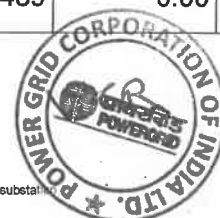
HDFC (Rs.5000 Cr.) -ACCRUAL IDC					
	2024-25	2025-26	2026-27	2027-28	2028-29
Gross Loan- Opening	0.67	0.67	0.67	0.67	0.67
Cumulative repayments of Loans upto previous year	0.34	0.34	0.34	0.37	0.40
Net loan-Opening	0.33	0.33	0.33	0.30	0.27
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.03	0.03	0.03
Net Loan-Closing	0.33	0.33	0.30	0.27	0.24



Average Net Loan	0.33	0.33	0.32	0.29	0.26
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	0.0267	0.0267	0.0259	0.0235	0.0211

HDFC (Rs.5000 Cr.) -DOCO FUNDING					
Gross Loan- Opening	323.64	323.64	323.64	323.64	323.64
Cumulative repayments of Loans upto previous year	163.51	163.51	163.51	179.52	195.53
Net loan-Opening	160.13	160.13	160.13	144.12	128.11
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	16.01	16.01	16.01
Net Loan-Closing	160.13	160.13	144.12	128.11	112.10
Average Net Loan	160.13	160.13	152.13	136.12	120.11
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	12.9705	12.9705	12.3225	11.0257	9.7289

BOND LXIX (69) -ADD CAP FUNDING					
Gross Loan- Opening	140.46	140.46	140.46	140.46	140.46
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	140.46	140.46
Net loan-Opening	140.46	140.46	140.46	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	140.46	0.00	0.00
Net Loan-Closing	140.46	140.46	0.00	0.00	0.00
Average Net Loan	140.46	140.46	70.23	0.00	0.00
Rate of Interest on Loan on Annual Basis	6.05	6.05	6.05	6.05	6.05
Interest on loan	8.4978	8.4978	4.2489	0.00	0.00



Canara-01 -ADD-CAP					
Gross Loan- Opening	52.93	52.93	52.93	52.93	52.93
Cumulative repayments of Loans upto previous year	5.29	7.94	13.23	18.53	23.82
Net loan-Opening	47.64	44.99	39.70	34.40	29.11
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	2.65	5.29	5.29	5.29	5.29
Net Loan-Closing	44.99	39.70	34.41	29.11	23.82
Average Net Loan	46.32	42.35	37.06	31.76	26.47
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	3.7751	3.4515	3.0204	2.5884	2.1573

Bond LXXV (75) -ADD-CAP					
Gross Loan- Opening	9.00	9.00	9.00	9.00	9.00
Cumulative repayments of Loans upto previous year	0.00	0.90	1.80	2.70	3.60
Net loan-Opening	9.00	8.10	7.20	6.30	5.40
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.90	0.90	0.90	0.90	0.90
Net Loan-Closing	8.10	7.20	6.30	5.40	4.50
Average Net Loan	8.55	7.65	6.75	5.85	4.95
Rate of Interest on Loan on Annual Basis	7.65	7.65	7.65	7.65	7.65
Interest on loan	0.6541	0.5852	0.5164	0.4475	0.3787

Summary

Gross Loan- Opening	537.76	537.76	537.76	537.76	537.76
Cumulative repayments of Loans upto previous year	171.29	175.95	183.24	347.05	370.38



Net loan-Opening	366.47	361.81	354.52	190.71	167.38
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	4.66	7.30	163.80	23.34	23.34
Net Loan-Closing	361.81	354.51	190.72	167.37	144.04
Average Net Loan	364.15	358.17	272.64	179.06	155.73
Rate of Interest on Loan on Annual Basis	7.3073	7.2944	7.5698	8.097	8.0968
Interest on loan	26.6097	26.1262	20.6384	14.4984	12.6091

(Petitioner)



Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

(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	525.85	528.21	528.21	528.21	528.21
Cumulative repayments of Normative loan upto previous year	117.92	164.61	211.39	258.17	304.95
Net normative loan-Opening	407.93	363.60	316.82	270.04	223.26
Addition in normative loan towards the ACE	2.36	0.00	0.00	0.00	0.00
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	46.69	46.78	46.78	46.78	37.59
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	363.60	316.82	270.04	223.26	185.67
Average normative loan	385.77	340.21	293.43	246.65	204.47
Weighted Average Rate of interest on actual loan	7.3073	7.2944	7.5698	8.097	8.0968
Interest on normative loan	28.19	24.82	22.21	19.97	16.56
Pro rata interest on normative loan	28.19	24.82	22.21	19.97	16.56

(Petitioner)



Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2029
2024-25						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	679.79	3.37	683.16	681.48	5.28	35.98
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	71.41	0.00	71.41	71.41	15.00	10.71
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	751.20	3.37	754.57	752.89	0.00	46.69
Weighted Average Rate of Depreciation(%)					6.201437	

2025-26						
Land(Freehold)	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	683.16	0.00	683.16	683.16	5.28	36.07
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	71.41	0.00	71.41	71.41	15.00	10.71
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	754.57	0.00	754.57	754.57	0.00	46.78
Weighted Average Rate of Depreciation(%)					6.199557	

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	683.16	0.00	683.16	683.16	5.28	36.07
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	71.41	0.00	71.41	71.41	15.00	10.71
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	754.57	0.00	754.57	754.57	0.00	46.78
Weighted Average Rate of Depreciation(%)						



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	683.16	0.00	683.16	683.16	5.28	36.07
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	71.41	0.00	71.41	71.41	15.00	10.71
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	754.57	0.00	754.57	754.57	0.00	46.78
Weighted Average Rate of Depreciation(%)					6.199557	

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	683.16	0.00	683.16	683.16	5.28	36.07
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	71.41	0.00	71.41	71.41	15.00	1.52
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	754.57	0.00	754.57	754.57	0.00	37.59



Weighted Average Rate of Depreciation(%)					4.981645	
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(Petitioner)



Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/ Project	23.00	23.00	23.00	23.00	23.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	2.00	3.00	4.00	5.00	6.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	21.00	20.00	19.00	18.00	17.00
Capital Base					
1.4 Opening capital cost	751.20	754.57	754.57	754.57	754.57
1.5 Additional Capital Expenditure dr. the year	3.37	0.00	0.00	0.00	0.00
1.6 De-Capitalisation During the year	0.00	0.00	0.00	0.00	0.00
1.7 Closing capital cost	754.57	754.57	754.57	754.57	754.57
1.8 Average capital cost	752.89	754.57	754.57	754.57	754.57
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	71.41	71.41	71.41	71.41	71.41
1.11 Asset having 10% salvage value included in 1.8	681.48	683.16	683.16	683.16	683.16
1.12 Depreciable Value(1.10+90% of 1.11)	684.74	686.25	686.25	686.25	686.25
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	6.201437	6.199557	6.199557	6.199557	4.981645



1.14 Depreciation(for the period)	46.69	46.78	46.78	46.78	37.59
1.15 Depreciation(Annualised)	46.69	46.78	46.78	46.78	37.59
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	117.92	164.61	211.39	258.17	304.95
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	164.61	211.39	258.17	304.95	342.54

(Petitioner)



Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Northern Region System Strengthening – XLII		
Element Description	02 Nos 220 KV Line Bays at Samba substation		
Region	Northern Region	DOCO Date	May 19, 2021

(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	3.45	3.63	3.82	4.02	4.23
Maintenance spares 15% of O&M Expenses	6.20	6.53	6.87	7.23	7.61
Receivables equivalent to 45 days of AFC	19.99	19.87	19.84	19.81	18.62
Total Working capital	29.64	30.03	30.53	31.06	30.46
Bank Rate as on 01.04.2019 or as on 01st April of the COD year, whichever is later.	11.90	11.90	11.90	11.90	11.90
Interest on working capital	3.53	3.57	3.63	3.70	3.62
Pro rata interest on working capital	3.53	3.57	3.63	3.70	3.62

(Petitioner)



Summary of issue involved in the petition

**PART-III
FORM- 15**

1. Name of the Petitioner	Power Grid Corporation of India Ltd
2. Petition Category	Transmission
3. Tariff Period	2024-29
4. Name of the Project	Northern Region System Strengthening-XLII
5. Investment Approval date	25.07.2019
6. SCOD of the Project	28.03.2021
7. Actual COD of the project	19.05.2021
8. Whether entire scope is covered in the present petition.	Yes
9. No. of Assets covered in instant petition	1
10. No. of Assets having time over run	1
11. Estimated Project Cost as per IA	Rs. 804.00 Lakhs
12. Is there any REC? if so, provide the date	
13. Revised Estimated Project Cost (if any)	
14. Completion cost for all the assets covered in the instant petition.	Rs. 771.60 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 involved:
18	Respondents

Name of Respondents

1	AJMER VIDYUT VITRAN NIGAM LTD
2	JAIPUR VIDYUT VITRAN NIGAM LTD
3	JODHPUR VIDYUT VITRAN NIGAM LTD
4	HIMACHAL PRADESH STATE ELECTRICITY BOARD LTD
5	PUNJAB STATE POWER CORPORATION LIMITED
6	HARYANA POWER PURCHASE CENTRE
7	POWER DEVELOPMENT DEPTT
8	UTTAR PRADESH POWER CORPORATION LTD.
9	BSES YAMUNA POWER Ltd
10	BSES RAJDHANI POWER Ltd
11	TATA POWER DELHI DISTRIBUTION LTD
12	CHANDIGARH ADMINISTRATION
13	UTTARAKHAND POWER CORPORATION LTD
14	NORTH CENTRAL RAILWAY
15	NEW DELHI MUNICIPAL COUNCIL
16	JAMMU & KASHMIR POWER TRANSMISSION CORPORATION LIMITED

(Petitioner)



PART-III

Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL the assets covered in the present petition.	
Name of the Petitioner	Power Grid Corporation of India Ltd
Tariff Period	2024-29
Name of the Transmission Project	Northern Region System Strengthening-XLII
COD of the Project (if entire scope of project is completed)	19.05.2021

Rupees in lakh

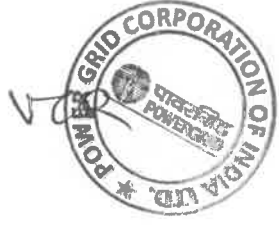
A) Summary of Capital Cost as on COD and Additional Capital Expenditure claimed for all the assets Covered in the instant petition.		ii) Summary of Actual / Projected Capital Cost														
S. No.	Asset No.	COD	Cut-off Date	i) Apportioned Approved Cost				ii) Summary of Actual / Projected Capital Cost								
				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	Total Completion Cost			
1	Asset-1	19.05.2021	31.05.2024	804	804	751.20	3.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	754.57	754.57
Total Capital Cost Claimed				804		751.20	3.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	754.57	754.57

B) Summary of Annual Fixed Cost (AFC) claimed for all the assets covered in the instant petition.

S. No.	Asset No.	Asset Name and its location	2024-25	2025-26	2026-27	2027-28	2028-29	2028-29	Capital Cost as on 31.03.2029	Total Completion Cost
1	Asset-1	2 number of 220 KV Line Bays at Samba Sub-station	162.17	161.18	160.93	161.16	151.00	161.16	161.16	151.00
Total AFC for all the Assets			162.17	161.18	160.93	161.16	151.00	161.16	161.16	151.00

Note: 1) The purpose of this form is to summarise the Capital cost & AFC claimed for all the assets covered in the instant petition.

(Petitioner)



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

PART-III

Form No.	Title of Tariff Filing Forms (Transmission& Communication System)	Tick
FORM- 1	Summary of Tariff	✓
FORM- 1A	Summary of Asset level cost	✓
FORM-2	Details of Transmission Lines and Substations and Communication System covered in the project scope and O&M for instant asset	✓
FORM-3	Normative parameters considered for tariff computations	✓
FORM- 4	Abstract of existing transmission assets/elements under project, Determination of Effective COD and Weighted Average Life for single AFC for the project as whole.	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	NA
FORM- 12	Details of time over run	NA
FORM- 12A	Incidental Expenditure during Construction	NA
FORM- 12B	Calculation of IDC & Financing Charges	NA
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	✓



Other Information/ Documents		
S. No.	Information/Document	Tick
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC)	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.

