

**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 **Asset-1:** Bypassing of 400 kV D/C Farakka - Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka - Durgapur (Ckt-1 & Ckt- 2) existing transmission line from NTPC, Farakka so as to form 400 kV D/C Kahalgaon - Durgapur along with upgraded bays at Durgapur Sub-station and Kahalgaon Substation, **Asset-2:** 01 No. 500 MVA, 400/220 kV Transformer (4th ICT) along with 01 No. 400 kV ICT bay (AIS) and 01 No. 220 kV ICT bay (GIS) along with 220 kV cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV Sub-station and **Asset-3:** LILO of both circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa New (POWERGRID) Sub-station along with associated 04 nos. 400 kV line bays at Saharsa New (POWERGRID) Sub-station under "**Eastern Region Strengthening Scheme-XXIII**" in the **Eastern Region** under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

Power Grid Corporation of India Ltd.

---PETITIONER

Registered office: B-9, Qutab Institutional Area,
Katwaria Sarai, New Delhi. 110 016.
Corporate Centre: 'SAUDAMINI', Plot No-2,
Sector-29, Gurugram-122 001 (Haryana).

Bihar State Power (Holding) Company Ltd

---Respondent

Vidyut Bhavan, Bailey Road, Patna – 800 001
Represented by its Chairman
And Others

FILED BY

POWER GRID CORPORATION OF INDIA LTD.

Place: Gurugram

REPRESENTED BY

DATED: 05/06/2025

(Angaru Naresh Kumar)

Deputy General Manager (Commercial)



**BEFORE
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NEW DELHI**

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IN THE MATTER OF: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for **Asset-1:** Bypassing of 400 kV D/C Farakka - Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka - Durgapur (Ckt-1 & Ckt- 2) existing transmission line from NTPC, Farakka so as to form 400 kV D/C Kahalgaon - Durgapur along with upgraded bays at Durgapur Sub-station and Kahalgaon Substation, **Asset-2:** 01 No. 500 MVA, 400/220 kV Transformer (4th ICT) along with 01 No. 400 kV ICT bay (AIS) and 01 No. 220 kV ICT bay (GIS) along with 220 kV cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV Sub-station and **Asset-3:** LILO of both circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa New (POWERGRID) Sub-station along with associated 04 nos. 400 kV line bays at Saharsa New (POWERGRID) Sub-station under **"Eastern Region Strengthening Scheme-XXIII" in the Eastern Region** under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

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Represented by its Chairman

And Others

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FILED BY

POWER GRID CORPORATION OF INDIA LTD.

Place: Gurugram

REPRESENTED BY

DATED: 05/06/2025

(Angaru Naresh Kumar)
Deputy General Manager (Commercial)



**BEFORE
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--- PETITIONER

Bihar State Power (Holding) Company Ltd

Vidyut Bhavan, Bailey Road, Patna – 800 001

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 Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms



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

Place: Gurugram

DATED: 05/06/2025

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

REPRESENTED BY


(Angaru Naresh Kumar)
Deputy General Manager (Commercial)



**BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
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Bihar State Power (Holding) Company Ltd

----- RESPONDENT(S)

Vidyut Bhavan, Bailey Road, Patna – 800 001
Represented by its Chairman
And Others

MEMO OF PARTIES

Power Grid Corporation of India Ltd.

--- PETITIONER

VERSUS

Eastern Region

--- RESPONDENTS

1. BIHAR STATE POWER (HOLDING) COMPANY LIMITED
(FORMERLY BIHAR STATE ELECTRICITY BOARD-BSEB)
VIDYUT BHAWAN, BAILEY ROAD
PATNA - 800 001
REPRESENTED BY ITS CHAIRMAN



2. WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED
BIDYUT BHAWAN, BIDHAN NAGAR
BLOCK DJ, SECTOR-II, SALT LAKE CITY
CALCUTTA - 700 091
REPRESENTED BY ITS CHAIRMAN
3. GRID CORPORATION OF ORISSA LTD.
SHAHID NAGAR, BHUBANESWAR - 751 007
REPRESENTED BY ITS CHAIRMAN cum MANAGING DIRECTOR
4. DAMODAR VALLEY CORPORATION
DVC TOWER, MANIKTALA
CIVIC CENTRE, VIP ROAD, CALCUTTA - 700 054
REPRESENTED BY ITS CHAIRMAN
5. POWER DEPARTMENT
GOVT. OF SIKKIM, GANGTOK - 737 101
REPRESENTED BY ITS COMMISSIONER & SECRETARY (POWER)
6. JHARKHAND BIJLI VITRAN NIGAM LTD.
ENGINEERING BUILDING, H.E.C., DHURWA
RANCHI - 834004
REPRESENTED BY ITS CHAIRMAN
7. NATIONAL THERMAL POWER CORPORATION LIMITED (NTPC),
NTPC BHAWAN, CORE-7, SCOPE COMPLEX,
7, INSTITUTIONAL AREA, LODHI ROAD,
NEW DELHI-110003.

GURGAON

DATED: 05/06/2015

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY

(Angaru Naresh Kumar)
Deputy General Manager (Commercial)



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Bihar State Power (Holding) Company Ltd

Vidyut Bhavan, Bailey Road, Patna – 800 001
Represented by its Chairman

And Others

MEMO OF APPEARANCE

POWER GRID CORPORATION OF INDIA LTD.

-- PETITIONER

1. Shri Dilip Nagesh Rozekar, ED (Commercial & RC), POWERGRID
2. Shri V. C. Sekhar, Sr. GM (Comml- RC), POWERGRID
3. Shri Zafrul Hasan, GM (Commercial), POWERGRID
4. **Shri. Angaru Naresh Kumar, DGM (Commercial), POWERGRID**
5. Smt. Suchitra Rani Gautam, DGM(Comml.-Petition), POWERGRID
6. Shri Arjun Malhotra, Manager (Commercial-Law), POWERGRID



I, Angaru Naresh Kumar, 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 05 day of June 2025.

PETITIONER

POWER GRID CORPORATION OF INDIA LTD.

GURGAON

DATED:-- 05/06/2025


Angaru Naresh Kumar

Deputy General Manager (Commercial)



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Bihar State Power (Holding) Company Ltd

---- RESPONDENT(S)

Vidyut Bhavan, Bailey Road, Patna – 800 001
Represented by its Chairman

And Others

A. Executive Summary of the Petition:

1. Brief Background of the Petitioner

The Petitioner herein, Power Grid Corporation of India Ltd. (Hereinafter referred to as **"POWERGRID/Petitioner"**) is a Government Company within the meaning of the Companies Act, 2013. POWERGRID is a deemed transmission licensee in terms of Section 14 of the Electricity Act, 2003. POWERGRID by virtue of a transmission licensee is required to inter-alia Build, Own, Operate and Maintain an efficient, coordinated and economical inter-state transmission system (**"ISTS"**). POWERGRID operates and functions within the regulatory control of this Hon'ble Central Electricity Regulatory Commission (hereinafter referred to as



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

2. Brief background of the Respondent(s):

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

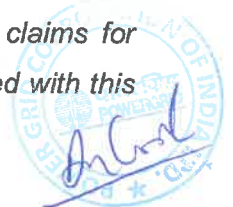
3. Background of Transmission Assets:

The present petition is filed for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for the following assets which are implemented under “Eastern Region Strengthening Scheme XXIII” and which covers entire scope of the project:

Table - I

Asset no	Description	DOCO	Petition NO.
1	Bypassing of 400 kV D/C Farakka - Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka - Durgapur (Ckt-1 & Ckt-2) existing Transmission Line from NTPC, Farakka so as to form 400 kV D/C Kahalgaon - Durgapur along with upgraded bays at Durgapur SS and Kahalgaon SS	02.01.2022	Earlier covered in petition No. 15/TT/2023#
2	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) along with 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) along with 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station	08.04.2022	
3	LILO of both Circuits of Kishanganj (POWERGRID) - Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa New (POWERGRID) sub-station along with associated 04 nos 400kV Line Bays at Saharsa New (POWERGRID) sub-station	28.04.2022	

After the commissioning of the aforesaid assets in Jan /April 2022, the tariff for the same was determined by the Hon’ble Commission vide order dated 11-01-2025 in the Petition no. – 15/TT/2023. In the said order, Hon’ble Commission had rejected the claims for condonation of delays with resultant deduction of IDC & IEDC. Being aggrieved with this



order, the petitioner has filed an appeal in APTEL (DFR no 104/2025) on 07.03.2025 in which proceeding is yet to be initiated. The Hon'ble Commission may kindly grant liberty to revise the claimed cost subject to the outcome of the said appeal.

4. Summary of Claims:

POWERGRID is seeking truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for aforesaid transmission assets on capital cost comprising of Capital Cost Admitted up to DOCO and Additional Capital Expenditure during 2019-24 & 2024-29 tariff blocks in accordance with terms of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("**Tariff Regulations, 2019**") and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 ("**Tariff Regulations, 2024**").

5. The details of FR/RCE approved cost vis-à-vis considered Capital Cost as on DOCO and Additional Capital Expenditure during 2019-24 and 2024-29 tariff block are as under:

Table - II

Rs in lakhs

Asset No.	Approved Cost as per FR/RCE	Considered Cost as on DOCO	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	2434.45/ 2296.63	1622.39	0.0	0.0	84.87	71.82	46.24	1825.32
Asset-2	3176.42/ 4400.95	3338.97	0.0	0.0	0.0	628.36	26.54	3993.87
Asset-3	18378.34/ 16479.20	13392.49	0.0	0.0	0.0	769.71	177.30	14339.5
Total	23989.21/ 23176.78	18353.85	0.0	0.0	84.87	1469.89	250.08	20158.69

For the tariff block 24-29, (All assets are combined as Combined Asset With ECOD: 14.04.2022)



Table - III

Rs in lakhs

Asset No.	Approved Cost as per FR/RCE	Expenditure Up to 31.03.2024	Estimated expenditure during 2024-29 tariff block					Estimated completion Cost as on 31.03.2029
			2024-25	2025-26	2026-27	2027-28	2028-29	
Combined Asset	23989.21/ 23176.78	20158.69	1527.41	108.65	0.0	0.0	0.0	21794.75

6. Details of tariff claimed are as under:

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

Table - IV

Rs in Lakhs

Name of the asset	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Asset -1	AFC approved	0.0	0.0	63.96	294.73	327.23
	Revised AFC based on truing up	0.0	0.0	63.31	284.00	295.62
Asset -2	AFC approved	0.0	0.0	0.0	798.05	869.69
	Revised AFC based on truing up	0.0	0.0	0.0	829.62	913.51
Asset -3	AFC approved	0.0	0.0	0.0	2165.41	2470.04
	Revised AFC based on truing up	0.0	0.0	0.0	2,155.63	2,382.78

Tariff claimed for 2024-29 tariff block:

Table - V

Rs in Lakhs

Name of the asset	2024-25	2025-26	2026-27	2027-28	2028-29
Combined Asset	3541.18	3613.63	3592.23	3624.45	3549.05



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:

8. The Petitioner herein, Power Grid Corporation of India Ltd ('POWERGRID') is a Government Company within the meaning of the Companies Act, 2013. POWERGRID is a deemed transmission licensee under Section 14 of the Electricity Act, 2003.
9. POWERGRID being transmission licensee is required to inter-alia build, own, operate and maintain an efficient, coordinated and economical interstate transmission system (ISTS). The tariff for the said transmission systems shall be determined by the Hon'ble Central Commission in accordance with the provisions of Tariff Regulations, 2019 and Tariff Regulations, 2024.
10. That the subject project/petition contains the following assets implemented under "Eastern Region Strengthening Scheme XXIII" and covers entire scope of the project:

Table - VI

Asset no	Description	DOCO	Petition NO.
1	Bypassing of 400 kV D/C Farakka - Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka - Durgapur (Ckt-1 & Ckt-2) existing Transmission Line from NTPC, Farakka so as to form 400 kV D/C Kahalgaon - Durgapur along with upgraded bays at Durgapur SS and Kahalgaon SS	02.01.2022	Earlier covered in petition No. 15/TT/2023#
2	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) along with 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) along with 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station	08.04.2022	
3	LILO of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa New (POWERGRID) sub-station along with associated 04 nos 400kV Line Bays at Saharsa New (POWERGRID) sub-station	28.04.2022	

After the commissioning of the aforesaid assets in Jan/March 2022, the tariff for the same was determined by the Hon'ble Commission vide order dated 11-01-2025 in the Petition no. – 15/TT/2023. In the said order, Hon'ble Commission had rejected the claims for condonation of delays with resultant deduction of IDC & IEDC. Being aggrieved with this order the petitioner have filed an appeal in APTEL (DFR no 104/2025) on 07.03.2025 in



which proceeding is yet to be initiated. The Hon'ble Commission may kindly grant liberty to revise the claimed cost subject to the outcome of the said appeal.

11. Cost detail:

The details of admitted cost for the assets covered in instant petition as per Hon'ble Commission order dated 11.01.2025 in petition no. 15/TT/2023 for 2019-24 tariff block and claimed cost now is given hereunder:

Capital cost details for 2019-24 tariff block:

Table - VII

Rs in Lakhs

Cost allowed as per order in petition no. 15/TT/2023								
Asset details:	Apportioned cost As per FR/RCE	Capital cost Admitted as on COD	Add -Cap 2019-24					Capital cost allowed as on 31.03.2024
			2019-20	2020-21	2021-22	2022-23	2023-24	
Asset-1	2434.45/ 2296.63	1621.21	0	0	151.93	320.49	181.50	2275.13
Asset-2	3176.42/ 4400.95	3335.11	0	0	0	626.71	118.43	4080.25
Asset-3	18378.34/ 16479.20	13372.43	0	0	0	1444.01	695.64	15512.08
Total	23989.21/ 23176.78	18328.75	0	0	151.93	2391.21	995.57	21867.46
Cost claimed in the instant petition								
Asset-1	2434.45/ 2296.63	1622.39	0.0	0.0	84.87	71.82	46.24	1825.32
Asset-2	3176.42/ 4400.95	3338.97	0.0	0.0	0.0	628.36	26.54	3993.87
Asset-3	18378.34/ 16479.20	13392.49	0.0	0.0	0.0	769.71	177.30	14339.5
Total	23989.21/ 23176.78	#18353.85	0.0	0.0	84.87	1469.89	250.08	20158.69

It is submitted that the cost as on COD claimed is more than the cost allowed by Honorable CERC. This is primarily on account of adding back of accrued IDC based on cash IDC statements as was submitted in the petition: 15/TT/2023 (page-219 to 221 of the petition). The details are mentioned at para :14 of the instant petition. The Cash IDC statements submitted in Petition: 15/TT/2023 are enclosed as **Annexure-1** (pg-132 to 140)



Further, there is a variation in actual ACE w.r.t approved ACE. The same is on account of the fact that earlier ACE were based on estimation and ACE now claimed are based on actual payments made to the vendor after receipt of final invoices and incorporating the amendments.

Capital cost details for 2024-29 tariff block: (All assets are combined with ECOD:14.04.2022)

Table-VIII

Rs in Lakhs

Asset Details	Apportioned cost	Expenditure as on 31.03.2024	Actual/Projected Add Cap 2024-29					Estimated completion cost as on 31.03.2029
	As per FR/RCE		2024-25	2025-26	2026-27	2027-28	2028-29	
Combined Asset	23989.21/ 23176.78	20158.69	1527.41	108.65	0.0	0.0	0.0	21794.75

Copy of auditor certificate w.r.t. claimed cost in the instant petition is enclosed at **Encl-2**.

12. Additional capitalization claims under Regulation:

The cut off date for each of the assets w.r.t. their DOCO is as given below:

Table-IX

Asset no	Description	DOCO	Cutoff date
1	Bypassing of 400 kV D/C Farakka - Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka - Durgapur (Ckt-1 & Ckt-2) existing Transmission Line from NTPC, Farakka so as to form 400 kV D/C Kahalgaon - Durgapur along with upgraded bays at Durgapur SS and Kahalgaon SS	02.01.2022	31.01.2025
2	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) along with 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) along with 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station	08.04.2022	30.04.2025
3	LILO of both Circuits of Kishanganj (POWERGRID) - Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa New (POWERGRID) sub-station along with associated 04 nos 400kV Line Bays at Saharsa New (POWERGRID) sub-station	28.04.2022	30.04.2025



Add cap for 2019-24 block:

Table-X

Asset	Add cap details (Rs. Lakhs)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Asset:1	0.0	0.0	84.87	71.82	46.24
	Applicable regulation				
			24(1)(a)	24(1)(a)	24(1)(a)
Asset:2	0.0	0.0		628.36	26.54
				Applicable regulation	Applicable regulation
				24(1)(a)	24(1)(a)
Asset:3	0.0	0.0	0.0	769.71	177.30
				Applicable regulation	Applicable regulation
				24(1)(a)	24(1)(a)

Add cap for 2024-29 block:

Table-XI

Asset	Add cap detail (Rs. Lakhs)				
	2024-25	2025-26	2026-27	2027-28	2028-29
Combined Asset (ECOD:14.04.2022)	1527.41	108.65	0	0	0
	Applicable regulation				
	24(1)(a)& 25(1)(d)	25(1)(d)	-	-	-

Detailed reasons for cost variation (Add-Cap admitted cost Vs now claimed cost):

It is submitted that the additional capitalization claimed for the Assets is within the original scope of the work.



The primary reason for variation in actual ACE w.r.t approved ACE is that earlier ACE were based on estimation and ACE now claimed are based on actual payments made to the vendor after receipt of final invoices and incorporating the amendments

The additional capital expenditure claimed in the 2019-24 period is on account of undischarged liability towards final payment/withheld payment due to contractual exigencies and for works executed within cut-off date and is to be dealt in accordance with clause 24(1)(a) of 2019 Tariff Regulations. The additional capital expenditure claimed in the 2024-29 period is to be dealt in accordance with Clause 25(1)(d) of 2024 Tariff Regulations.

Further, Liability flow statement for instant Assets is enclosed at **Encl-3**. The details of additional capitalization for instant assets are given in **Form-7**. Hon'ble Commission is requested to allow the same.

13. Initial spares:

Initial spares claimed under subject project has already been allowed by this Hon'ble Commission vide order dated 11.03.2025 in petition no. 15/TT/2023 (Refer Para 109 of said order) as the same was well within permissible limits.

14. Capital cost claimed for tariff purpose for 2019-24 block:

The details for subject assets are as detailed below:

Asset 1: Bypassing of 400 kV D/C Farakka - Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka - Durgapur (Ckt-1 & Ckt-2) existing Transmission Line from NTPC, Farakka so as to form 400 kV D/C Kahalgaon - Durgapur along with upgraded bays at Durgapur SS and Kahalgaon SS.

Table-XII

Rs in Lakhs

S.no	Expenditure	T/L	S/S	OPGW	Comm.	Total
1	Expenditure upto COD(02.01.2022) as per AC	1052.55	381.03	149.00	134.22	1716.80
2	IDC/IEDC disallowed due to time over run not condoned	57.86	20.94	8.19	7.38	94.37
3	undischarged IDC as on COD	0.03	0.01	0.00	0.00	0.04
4	Capital cost considered as on DOCO	994.66	360.08	140.81	126.84	1622.39



S.no	Expenditure	T/L	S/S	OPGW	Comm.	Total
5	Expenditure for 2021-22 as per AC	33.29	51.58	0.00	0.00	84.87
6	add :Accural IDC discharged in 2021-22	0.03	0.01	0.00	0.00	0.04
7	less disallowed IDC/IEDC	0.03	0.01	0.00	0.00	0.04
8	Expenditure considered for 2021-22	33.29	51.58	0.00	0.00	84.87
9	Expenditure considered for 2022-23	38.73	31.62	0.00	1.47	71.82
10	Actual Expenditure 2023-24 As per auditor certificate	0.00	34.17	0.00	0.60	34.77
11	LD added back on account of IDC/IEDC deducted	0.00	11.47	0.00	0.00	11.47
12	Net Expenditure in 2023-24.	0.00	45.64	0.00	0.60	46.24
13	Total up to 31.03.2024	1066.68	488.91	140.81	128.91	1825.32

Asset 2: 01 no. 500 MVA, 400/220 kV Transformer (4th ICT) along with 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) along with 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station

Table-XIII

Rs in Lakhs

S.no	Expenditure	T/L	S/S	OPGW	Comm.	I.T. Equipment	Total
1	Expenditure upto COD(08.04.2022) as per AC	0	3598.66	0.00	0.00	0.00	3598.66
2	IDC/IEDC disallowed due to time over run not condoned	0	259.36	0.00	0.00	0.00	259.36
3	undischarged IDC as on COD	0	0.33	0.00	0.00	0.00	0.33
4	Capital cost considered as on DOCO	0	3338.97	0.00	0.00	0.00	3338.97



S.no	Expenditure	T/L	S/S	OPGW	Comm.	I.T. Equipment	Total
5	Expenditure considered for 2022-23 as per AC	0	628.36	0.00	0.00	0.00	628.36
6	add :Accural IDC discharged in 2022-23	0	0.33	0.00	0.00	0.00	0.33
7	less disallowed IDC/IEDC	0	0.33	0.00	0.00	0.00	0.33
8	Expenditure considered for 2022-23	0	628.36	0.00	0.00	0.00	628.36
9	Actual Expenditure 2023-24 As per auditor certificate	0	26.54	0.00	0.00	0.00	26.54
10	Total up to 31.03.2024	0.0	3993.87	0.0	0.0	0.0	3993.87

Asset 3: LILO of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa New (POWERGRID) sub-station along with associated 04 nos 400kV Line Bays at Saharsa New (POWERGRID) sub-station.

Table-XIV

Rs in Lakhs

S.no	Expenditure	T/L	S/S	OPGW	Comm.	I.T. Equipment	Total
1	Expenditure upto COD(08.04.2022) as per AC	11890.40	1935.18	0.00	159.70	36.70	14021.98
2	IDC/IEDC disallowed due to time over run not condoned	498.81	81.18	0.00	6.70	1.54	588.23
3	undischarged IDC as on COD	34.99	5.69	0.00	0.47	0.11	41.26



S.no	Expenditure	T/L	S/S	OPGW	Comm.	I.T. Equipment	Total
4	Capital cost considered as on DOCO	11356.60	1848.31	0.00	152.53	35.05	13392.49
5	Expenditure for 2022-23 as per AC	527.20	242.51	0.00	0.00	0.00	769.71
6	add :Accrual IDC discharged in 2022-23	34.99	5.69	0.00	0.47	0.11	41.26
7	less disallowed IDC/IEDC	34.99	5.69	0.00	0.47	0.11	41.26
8	Expenditure considered for 2022-23	527.20	242.51	0.00	0.00	0.00	769.71
9	Actual Expenditure 2023-24 As per auditor certificate	81.48	95.82	0.00	0.00	0.00	177.30
10	Total up to 31.03.2024	11965.28	2186.64	0.00	152.53	35.05	14339.50

15. Capital cost claimed for tariff purpose for 2024-29 block

Combined Assets (ECOD:14.04.2022)

Table-XIV

Rs in Lakhs

S.no	Expenditure	T/L	S/S	OPGW	Communication	I.T. Equipment	Total
1	Expenditure considered upto 31.03.2024	13031.96	6669.42	140.81	281.44	35.05	20158.69
2	Expenditure considered for 24-25	495.27	930.45	0.00	81.40	20.29	1527.41
3	Expenditure considered for 25-26	108.65	0.00	0.00	0.00	0.00	108.65
4	total cost	13635.88	7599.87	140.81	362.84	55.34	21794.75



Debt: Equity Ratio: The actual debt equity ratio deployed in instant assets 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- 18 and 19 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.

16. CERC compliances to direction given in Order dated 11.01.2025 in 15/TT/2023:

- i. Honorable' Commission has directed to clarify vide para 19 of the said order the following:

Quote:

"19. The Petitioner is directed to clarify how the COD of Asset-1 was claimed on 2.1.2022, when the CEA Energisation Certificate was issued on 25.3.2022 at the time of truing-up. We provisionally approve the COD of Asset-1 as 2.1.2022, and the same will be reviewed at the time of truing-up after the Petitioner submits the clarification of the CEA energization certificate."

Unquote:

In reference to the above direction, It is submitted that Director, CEA granted the approval of the energization of 400kV Kahalgaon-Durgapur Ckt 1 vide email dated 29.12.2021. The same is also referred to in the letter dated 25.03.2022 issued by CEA. (copy of the email is attached at **Annexure-2**). (Pg-141)

- ii. Honorable' Commission has directed to submit vide para 21 of the said order the following:

Quote:

"21. It has been observed that the Petitioner has not submitted the CMD Certificate in the case of Assets-1, 2, and 3. The Petitioner is directed to submit the same at the time of truing-up."

Unquote:

In reference to the above direction, It is submitted that the CMD Certificate in the case of Assets-1, 2, and 3 are enclosed at **Annexure-3**. (Pg-142 to 144)

- iii. Honorable' Commission has directed to submit vide para 31 of the said order the following:

Quote:

"31. As per the IA, the FR apportioned approved cost of the transmission project is ₹23989 lakh, and as per the RCE, the RCE approved cost of the transmission project is ₹23177 lakh."



It has been observed that as compared with the FR-approved cost, the overall project cost has been reduced by ₹812 lakh. The Petitioner is directed to submit the reasons for taking approval of RCE when the cost for the overall project has been reduced, at the time of truing-up."

Unquote:

In reference to the above direction, it is submitted that approved FR cost of the whole transmission project i.e ₹23989 lakh, is more than the approved RCE cost of the transmission project i.e ₹23177 lakh. However, the approval of RCE was taken because among the three assets of the project, total cost i.r.o asset -2 of ₹ 4339.94 lakhs was more than the respective apportioned cost of FR of ₹ 3176.42 contained in the project.

iv. Honorable' Commission has directed to submit vide para 32 of the said order the following:

"32. In the case of Asset-3, we have reviewed Form-5 and observed that the cost variation is on the higher side, and the Petitioner is directed to clarify the reasons for the higher cost with the valid documentary proof at the time of the truing-up.

Particulars	Cost as per original estimate	Actual capital expenditure	(₹ in lakh)
			Variation
Sub-station Auxiliaries	438.12	722.05	283.93
Overheads (Establishment, Audit and Accounts, contingency, other over heads)	378.08	766.85	388.77

"

Unquote:

In reference to the above direction, it is submitted that variation mentioned above in the table pertains to Asset-2 i.e "01 no. 500 MVA, 400/220 kV Transformer (4th ICT) along with 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) along with 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station", as it is noted inadvertently for asset-3 by Honorable Commission.

The reasons for variations are detailed as :

- a. Substation Auxiliaries: Substation auxiliary head includes the following items such as 220 kV HV cables, Power & Control cables, Firefighting, Lighting, LT switchgear etc. The variation in actual expenditure as compared to the FR cost is primarily due to higher procurement cost of 220 kV EHV Cable and its accessories as per the award placed through the competitive bidding process. The FR cost was ₹352.09 lakhs while the actual



cost was ₹602.57 Lakhs (Cost is including LOA cost, PV and applicable GST). Supporting documents are enclosed at **Annexure-4.** (Pg-145)

b. Overheads(Establishment, Audit and Accounts, contingency, other over heads): The IEDC cost is booked as per actual expenditure.

v. Honorable' Commission has directed to submit vide para 132 of the said order the following:

"132. It is observed that the CEA Energisation Certificate as well as ERLDC Trial Run Certificate is for D/C LOOP-IN and DC LOOP-OUT for LILO of Kishanganj – Darbhanga 400 kV D/C line at Saharsa, whereas the Petitioner has claimed the different configurations in respect of Line-Out and Line-In portion for O&M Expenses. The Petitioner is directed to submit a detailed justification along with supporting documents for review at the time of truing up."

Unquote:

In reference to the above direction, it is submitted that LOOP-IN and LOOP-OUT for LILO of Kishanganj – Darbhanga 400 kV D/C line at Saharsa are double circuit as also mentioned in CEA and RLDC trail run Certificate. However, LOOP-OUT for LILO of Kishanganj – Darbhanga 400 kV D/C line at Saharsa was claimed as S/C inadvertently. Now, O&M Expenses for LOOP-OUT for LILO of Kishanganj – Darbhanga 400 kV D/C line at Saharsa is claimed as D/C in the instant petition. It is prayed to the Hon'ble Commission to allow the tariff claimed. Copy of CEA and RLDC trail run Certificate are also enclosed as **Annexure- 5.**

17. Transmission tariff:

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

Regulation 13 of Tariff Regulations, 2019:

Quote

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

.....

Unquote

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

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

Quote



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

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

While filing Tariff petition for 2019-24 period, the petitioner had prayed for allowing the floating rate of Interest on loan adjustments. As per Hon'ble Commission order dated 29.04.2023 in petition no. 196/TT/2022, it has been stated that the weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019 and accordingly, the floating rate of interest on actual, applicable from time to time, if any, during 2019-24 tariff shall be considered at the time of true up or next revision of tariff.

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

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

Table-XVI

Rs in Lakh

Name of the asset	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Asset -1	AFC approved	0.0	0.0	63.96	294.73	327.23
	Revised AFC based on truing up	0.0	0.0	63.31	284.00	295.62
Asset -2	AFC approved	0.0	0.0	0.0	798.05	869.69
	Revised AFC based on truing up	0.0	0.0	0.0	829.62	913.51
Asset -3	AFC approved	0.0	0.0	0.0	2165.41	2470.04
	Revised AFC based on truing up	0.0	0.0	0.0	2,155.63	2,382.78

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



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

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

Table-XVII

Rs in lakhs

Name of the asset	2024-25	2025-26	2026-27	2027-28	2028-29
Combined Asset	3541.18	3613.63	3592.23	3624.45	3549.05

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

20. The asset will complete 12 years of life in 2034-35 i.e. beyond tariff block 24-29 and thus depreciation till 2024-29 has been calculated based on the straight-line method and at rate specified in Appendix-I as per clause 33 (5) of the CERC Tariff regulations 2024. The details have been computed and are provided in Form- 10 A.
21. 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.



22. 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 18 & 19 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.
23. 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 was submitted in the petition vide **Diary NO:677/2024.**

These documents/details are also available on our website at the following link: https://apps.powergrid.in/cerc/docs/Western%20Region/2024/09/Khargone%20TPS/Scanned_petition_Khargone_TPS.pdf.

24. The transmission charges at para 18 & 19 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.
25. 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.

a. 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 Regulation 35 (3) (C) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and recovery of security expenses from 01.04.2024 to 31.03.2029 under Regulation 36 (3) (d) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

b. 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.

c. Capital Spare:

With regard to Capital Spares, the Petitioner has filed a separate Petition bearing No 45/MP/2024 for claiming the capital spares under Tariff Regulations, 2019 for 2019-24 period. Further, as per Tariff Regulations, 2024, Capital spares consumed and consequential Interest on Working Capital (IOWC) on the same shall be claimed by the Petitioner for 2024-29 period as per actuals through a separate petition.

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

26. 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.

27. The application filing fee, expenses incurred on publication of notices in Newspapers and License fee may be allowed to be recovered separately from the respondents in terms of Regulation 94(1) & 94(4) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024. The fees and charges to be paid by the petitioner as ISTS licensee (deemed ISTS licensee) under CERC (Fees and Charges of RLDC and other matters) Regulations, 2023 as amended from time to time shall also be recoverable from the DICs as provided under clause 94(3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.
28. The Transmission Charges and other related Charges indicated at para 18 & 19 above, is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, filing fees, license fee, RLDC fees and charges, capital spares, security expenses, insurance expenses or any other kind of imposition (s) and/ or other surcharges etc. whatsoever imposed / charged by any Government (Central/State) and / or any other local bodies/authorities/regulatory authorities in relation to transmission of electricity, environmental protection, and/or in respect of any of its installation associated with the Transmission System



and the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged, billed separately by the petitioner on the respondents.

29. Sharing of Transmission Charges

Truing up tariff for Transmission of Electricity (Annual Fixed Cost) for 2019-24 as per para 18 above shall be recovered on monthly basis in accordance with Regulation 57 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and shall be shared by the beneficiaries and long-term transmission customers in terms of Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 and Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020, as amended from time to time for the applicable periods.

Tariff for Transmission of Electricity (Annual Fixed Cost) for 2024-29 as per para 19 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.

- 30.** In the circumstances mentioned above, it will be just and proper that the transmission tariff for the assets covered under this petition be allowed to be charged from the beneficiaries on the basis set out above. **The Petitioner submits that Encl.-1 to Encl.-5 and Annexure- 1 to 4 may please be treated as integral part of this petition.**

C. PRAYER

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

- a) Approve the trued-up Transmission Tariff for 2019-24 block and transmission tariff for 2024-29 block for the assets covered under this petition, as per para 18 & 19 above.
- b) Admit the capital cost claimed and additional capitalization incurred during 2019-24 and 2024-29 tariff block.
- c) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulations 2019 and Tariff Regulations, 2024 as per para 18 & 19 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 25(a) 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 25(b) 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 25(c) above.
- j) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition as mentioned at para 26 above.
- k) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.



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

FILED BY

Place: Gurugram

POWER GRID CORPORATION OF INDIA LTD.

DATED:-- 05/06/2025

REPRESENTED BY


(Angaru Naresh Kumar)
Deputy General Manager (Commercial)



BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

PETITION NO.:

IN THE MATTER OF: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for **Asset-1:** Bypassing of 400 kV D/C Farakka - Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka - Durgapur (Ckt-1 & Ckt- 2) existing transmission line from NTPC, Farakka so as to form 400 kV D/C Kahalgaon - Durgapur along with upgraded bays at Durgapur Sub-station and Kahalgaon Substation, **Asset-2:** 01 No. 500 MVA, 400/220 kV Transformer (4th ICT) along with 01 No. 400 kV ICT bay (AIS) and 01 No. 220 kV ICT bay (GIS) along with 220 kV cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV Sub-station and **Asset-3:** LILO of both circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa New (POWERGRID) Sub-station along with associated 04 nos. 400 kV line bays at Saharsa New (POWERGRID) Sub-station under "**Eastern Region Strengthening Scheme-XXIII**" in the **Eastern Region** under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

Power Grid Corporation of India Ltd.

---PETITIONER

Registered office: B-9, Qutab Institutional Area,

Katwaria Sarai, New Delhi. 110 016.

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

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

Bihar State Power (Holding) Company Ltd

--- RESPONDENT

Vidyut Bhavan, Bailey Road, Patna – 800 001 .

Represented by its Chairman

And Others

AFFIDAVIT VERIFYING THE PETITION

I, Angaru Naresh Kumar, S/o Late Shri Angaru Yanadi, working as Deputy General Manager (Commercial) in the PowerGrid Corporation of India Ltd., having its registered Office at B-9, Institutional Area, Katwaria Sarai, New Delhi-110 016, do hereby solemnly affirm and state as under:-



1. That the deponent is the Deputy General Manager (Commercial) 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 30 of the facts as mentioned in the Petition are true and correct based on the my personal knowledge, belief and records maintained in the office and the contents of Para 01 to 30 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 05 June ' 2025 that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.


(DEPONENT)

ATTESTED

MAHENDER 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 / DILIPROZEKARExecutive 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)केन्द्रीय कार्यालय : 'सौदामिनी' प्लॉट सं. 2, सेक्टर-29, गुरुग्राम-122001, (हरियाणा), दूरभाष : 0124-2571700-719
Corporate Office : "Saudamini", Plot No. 2, Sector-29, Gurugram-122001, (Haryana) Tel. : 0124-2571700-719पंजीकृत कार्यालय : बी-9, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016 011-26560112, 26564812, 26564892, सीआईएन : L40101DL1989GOI038121
Registered Office : B-9, Qutab Institution Area, Katwaria Sarai, New Delhi-110016. Tel.: 011-26560112, 26564812, 26564892, CIN : L40101DL1989GOI038121
Website : www.powergridindia.com

Encl-1.

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 15/TT/2023

Coram:

**Shri Jishnu Barua, Chairperson
Shri Ramesh Babu V., Member**

Date of Order : 11.01.2025

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and determination of transmission tariff from COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of **Asset-1**: Bypassing of 400 kV D/C Farakka - Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka - Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400 kV D/C Kahalgaon - Durgapur along with upgraded bays at Durgapur Sub-station and Kahalgaon Sub-station, **Asset-2**: 01 No. 500 MVA, 400/220 kV Transformer (4th ICT) along with 01 No. 400 kV ICT bay (AIS) and 01 No. 220 kV ICT bay (GIS) along with 220 kV cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV Sub-station and **Asset-3**: LILO of both circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa New (POWERGRID) Sub-station along with associated 04 nos. 400 kV line bays at Saharsa New (POWERGRID) Sub-station under "Eastern Region Strengthening Scheme-XXIII" in the Eastern Region.

And in the matter of:

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

.....Petitioner

Versus

- 1. Bihar State Power (Holding) Company Limited,
Vidyut Bhawan, Bailey Road,
Patna-800001.**
- 2. West Bengal State Electricity Distribution Company Limited
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City,
Calcutta-700091.**


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

3. **Grid Corporation of Orissa Limited**,
Shahid Nagar,
Bhubaneswar-751007.
4. **Damodar Valley Corporation**,
DVC Tower, Maniktala,
Civic Centre, VIP Road,
Calcutta-700054.
5. **Power Department, Government of Sikkim**,
Gangtok-737101.
6. **Jharkhand Bijli Vitran Nigam Limited**,
Engineering Building, H.E.C., Dhurwa,
Ranchi-834004.
7. **National Thermal Power Corporation Limited (NTPC)**,
NTPC Bhawan, Core-7, Scope Complex,
7, Institutional Area, Lodhi Road,
New Delhi-110003.

...Respondent(s)

Parties Present: Ms. Roshini Prasad, Advocate, BSPHCL
Shri Anup Kashyap, Advocate, BSPHCL
Shri Mohd. Mosin, PGCIL
Shri Zafrul Hasan, PGCIL
Ms. Suchitra, PGCIL

ORDER

The Petitioner, Power Grid Corporation of India Limited (PGCIL), has filed the instant Petition for the determination of transmission tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") for the period from COD to 31.3.2024 in respect of the following assets (hereinafter referred to as "the transmission assets") under "Eastern Region Strengthening Scheme-XXIII" (hereinafter referred to as "the transmission project") in the Eastern Region:



Asset-1: Bypassing of 400 kV D/C Farakka - Kahalgaon (Ckt-3 and Ckt-4) and 400 kV S/C Farakka - Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400 kV D/C Kahalgaon - Durgapur along with upgraded bays at Durgapur Sub-station and Kahalgaon Sub-station;

Asset-2: 01 No. 500 MVA, 400/220 kV Transformer (4th ICT) along with 01 No. 400 kV ICT bay (AIS) and 01 No. 220 kV ICT bay (GIS) along with 220 kV Cable from ICT to GIS bay at Muzaffarpur (Powergrid) 400/220 kV Sub-station; and

Asset-3: LILO of both circuits of Kishanganj (Powergrid) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa New (Powergrid) Sub-station along with associated 04 nos. 400 kV line bays at Saharsa New (Powergrid) Sub-station.

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

- "1) Approve the Transmission Tariff for the tariff block 2019-24 block for the assets covered under this petition, as per para-8.3 above.*
- 2) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.*
- 3) Approve the DOCO for the subject Assets as claimed and allow full tariff as claimed under instant petition.*
- 4) Approve the initial spares as claimed in the instant petition.*
- 5) Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses separately.*
- 6) 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 as per para 8.3 above 2019 for respective block.*
- 7) 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.*
- 8) 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.*
- 9) 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.*
- 10) 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.

11) Allow interim tariff in accordance with Regulation 10(3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.

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

Background

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

- a. The Investment Approval (IA) and expenditure sanction for the transmission project was accorded by the Board of Directors (BoD) of the Petitioner's Company on 11.7.2020 and has been communicated vide Memorandum No. C/CP/PA2021-04-0F-IA006 dated 15.7.2020 at an estimated cost of ₹23989 lakhs, including an IDC of ₹688 lakhs based on the March 2020 price level. The project was scheduled to be commissioned within 11 months from the date of the IA.
- b. The Petitioner vide affidavit dated 6.9.2023 has submitted a Revised Cost Estimate (RCE) approved by the competent authority on 8.8.2023 and communicated vide Memorandum Ref No. C/CP/PA2324-05-0T-RCE006 dated 9.8.2023 with the revised cost estimate of ₹23177 lakhs, including an IDC of ₹2.03 lakhs based on the March 2020 price level.
- c. The scope of work covered under the transmission project broadly includes as under:

Transmission Lines:

- (i) LILO of both circuits of Kishanganj (Powergrid) – Darbhanga (DMTCL)
 - a. 400 kV D/C (Quad) line at Saharsa (New) - 41 km

(ii) Bypassing of Farakka – Kahalgaon (Ckt-3 and Ckt-4) and Farakka – Durgapur

- a. 400 kV D/C lines of Powergrid so as to form Kahalgaon – Durgapur 400 kV D/C line – 3.17 km

Sub-station

(i) Extension at Muzaffarpur (Powergrid) 400/220 kV Sub-station

i. Transformer Bays

- a. 1 No. 400 kV ICT Bay in AIS
- b. 1 No. 220 kV ICT bays in GIS

ii. 500 MVA, 400/220 kV transformer (4th ICT): 1 No.

iii. 220 kV cable from ICT to GIS bay

(ii) Extension at Saharsa (New) 400/220/132 kV Sub-station

- a. 400 kV Line Bays: 4 nos. (for termination of LILO of both circuits of Kishanganj (Powergrid) – Darbhanga (DMTL) 400 kV D/C line at Saharsa – New)

(iii) Extension at Kahalgaon 400/132 kV Switchyard

- a. Upgradation of 400 kV line bays equipment: 2 nos. for termination of Kahalgaon – Durgapur line section formed after bypassing of the line.

(iv) Extension at Durgapur 400/220 kV Sub-station

- a. Upgradation of 400 kV line bays equipment: 2 nos. for termination of Kahalgaon – Durgapur line section formed after bypassing of the line.

d. The details of the transmission assets, including scheduled commercial operation date (SCOD), date of commercial operation (COD), and time over-run, are as follows:



Assets	Asset Details	SCOD	COD	Time over-run
Asset-1	Bypassing of 400 kV D/C Farakka - Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka - Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400 kV D/C Kahalgaon - Durgapur along with upgraded bays at Durgapur Sub-station and Kahalgaon Sub-station	10.6.2021	2.1.2022	206 days
Asset-2	01 No. 500 MVA, 400/220 kV Transformer (4 th ICT) along with 01 No. 400 kV ICT bay (AIS) and 1 No. 220 kV ICT bay (GIS) along with 220 kV cable from ICT to GIS bay at Muzaffarpur (Powergrid) 400/220 kV Sub-station		8.4.2022	302 days
Asset-3	LILO of both Circuits of Kishanganj (Powergrid) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa New (Powergrid) sub-station along with associated 04 nos. 400 kV Line Bays at Saharsa New (Powergrid) Sub-station		28.4.2022	

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

5. The Petitioner has served a copy of the Petition on the Respondents, and notice regarding the filing of this 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. Respondent No. 1 Bihar State Power (Holding) Company Limited (BSHPCL) has submitted its reply vide affidavit dated 16.10.2023 highlighting issues of time over-run, cost over-run with respect to Asset-2, Additional Capital Expenditure (ACE), Capital Cost, Return on Equity (RoE), tax on RoE, Interest on Loan (IoL), Recovery of Statutory Charges, Filing Fees and Sharing of Transmission Charges. The Petitioner has filed a rejoinder, vide affidavit dated



13.12.2023. The issues raised by BSPHCL and the clarifications thereto given by the Petitioner are considered in the relevant portions of this order.

6. This order is issued considering the submissions made by the Petitioner in the Petition and subsequent affidavits dated 3.3.2023, 6.9.2023, 26.9.2023, and 20.11.2023, the reply of BSPHCL vide affidavit dated 16.10.2023 and rejoinder of the Petitioner to the reply of BSPHCL vide affidavit dated 13.12.2023.

7. The hearing in this matter was held on 20.12.2023 through video conference, and the order was reserved. However, the order could not be issued prior to Shri P.K. Singh, a Member, demitting the office. Consequently, the matter was listed for hearing on 16.7.2024, and the order was reserved.

8. Having heard the representatives of the Petitioner and the learned counsel for BSPHCL and after perusing the material on record, we proceed to dispose of the Petition.

Determination of Annual Fixed Charges for 2019-24 Tariff Period

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

Asset-1

Particulars	(₹ in lakh)		
	2021-22 (pro-rata 89 days)	2022-23	2023-24
Depreciation	23.22	107.66	120.90
Interest on Loan	18.04	79.90	83.53
Return on Equity	24.63	114.29	128.40
Interest on Working Capital	0.89	4.08	4.48
O&M Expenses	0.73	3.12	3.23
Total	67.51	309.05	340.54



Asset-2

(₹ in lakh)

Particulars	2022-23 (pro-rata for 358 days)	2023-24
Depreciation	202.58	226.12
Interest on Loan	154.04	159.74
Return on Equity	216.18	241.30
Interest on Working Capital	16.90	18.08
O&M Expenses	247.41	260.62
Total	837.11	905.86

Asset-3

(₹ in lakh)

Particulars	2022-23 (pro-rata for 338 days)	2023-24
Depreciation	724.24	840.57
Interest on Loan	554.42	597.12
Return on Equity	767.71	889.91
Interest on Working Capital	33.39	37.76
O&M Expenses	172.85	193.21
Total	2252.61	2558.57

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

Asset-1

(₹ in lakh)

Particulars	2021-22 (pro-rata 89 days)	2022-23	2023-24
O&M Expenses	0.25	0.26	0.27
Maintenance Spares	0.45	0.47	0.48
Receivables	34.14	38.10	41.87
Total Working Capital	34.84	38.83	42.62
Rate of Interest (in %)	10.50	10.50	10.50
Interest on Working Capital	0.89	4.08	4.48

Asset-2

(₹ in lakh)

Particulars	2022-23 (pro-rata for 358 days)	2023-24
O&M Expenses	21.02	21.72
Maintenance Spares	37.84	39.09



Particulars	2022-23 (pro-rata for 358 days)	2023-24
Receivables	105.22	111.38
Total Working Capital	164.08	172.19
Rate of Interest (in %)	10.50	10.50
Interest on Working Capital	16.90	18.08

Asset-3

(₹ in lakh)

Particulars	2022-23 (pro-rata for 338 days)	2023-24
O&M Expenses	15.56	16.10
Maintenance Spares	28.00	28.98
Receivables	299.90	314.58
Total Working Capital	343.46	359.66
Rate of Interest (in %)	10.50	10.50
Interest on Working Capital	33.39	37.76

Date of Commercial Operation ("COD")

11. The Petitioner has claimed actual dates of commercial operation in respect of Asset-1 as 2.1.2022, Asset-2 as 8.4.2022 and Asset-3 as 28.4.2022.

12. 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) Energization 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."

13. The Petitioner has submitted the following documents in support of the COD of the transmission assets:



Assets	COD	Document Submitted
Asset-1	2.1.2022	(a) Notification of COD vide Ref. No. ER-II/KOL/DOCO/C-1/ dated 7.1.2022 issued by the Executive Director of the Petitioner Company. (b) CEA Regional Inspectoral Organisation Energization certificates dated 13.12.2021 for Ckt-3 and Ckt-2 and 25.3.2022 for Ckt-4 and Ckt-1. (c) ERLDC certificates dated 7.6.2022 against successful completion of trial run operation on load charging dated 19.12.2021 & 1.1.2022. (d) CMD certificate to confirm the capability of operation of asset to their full capacity as per requirement of COD w.e.f. 16:00 Hrs of 1.1.2022.
Asset-2	8.4.2022	(a) Notification of COD vide Ref. No. E/PT/COML/DOCO/2022-23/1854 dated 20.4.2022 issued by the Executive Director of the Petitioner Company (b) CEA Regional Inspectoral Organisation Energization certificate dated 26.3.2022. (c) ERLDC certificate dated 22.4.2022 against successful completion of trial run operation on load charging dated 7.4.2022.
Asset-3	28.4.2022	(a) Notification of COD vide Ref. No. E/PT/COMML/DOCO/2022-23/860 dated 29.4.2022 issued by the Executive Director of the Petitioner Company. (b) CEA Regional Inspectoral Organisation Energization certificates dated 11.4.2022 for extension bays, 12.4.2022 for LILO OUT of double circuit line, and 20.4.2022 for LILO IN of double circuit line. (c) ERLDC certificate dated 13.5.2022 against successful completion of trial run operation on load charging dated 23.4.2022 and 27.4.2022.

14. BSPHCL has submitted that a perusal of approval for energization, dated 26.3.2022 and 11.4.2022 shows that approval was accorded to energize 500 MVA ICT and associated bays at 400/220 kV (the Petitioner's company), Muzaffarpur Sub-station and electrical installations of 400 kV extension bays of the Petitioner's company at 400 kV Saharsa Sub-station, respectively, subject to certain additional conditions mentioned in the said approvals. The Petitioner is required to give details regarding compliance with those conditions.

15. In response, the Petitioner has submitted that the contentions raised by BSPHCL are misconceived. The Petitioner has further submitted that the certain additional conditions mentioned in the Central Electricity Authority (CEA) approvals had been



complied with and carried out in a timely manner as stated by the CEA in the approval for energization dated 26.3.2022 and 11.4.2022.

16. We have considered the submissions made by the Petitioner and BSPHCL.

17. It is noticed that the Petitioner has submitted the CEA Energisation Certificate dated 13.12.2021 and 25.3.2022. We deem it proper to make the CEA Energisation Certificates as part of this order, which are as follows:





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GOVERNMENT OF INDIA
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MINISTRY OF POWER, CENTRAL ELECTRICITY AUTHORITY
क्षेत्रीय निरीक्षण संगठन
REGIONAL INSPECTORIAL ORGANISATION

No. RIO/ER/Approval (1)/Powergrid-Farakka/2021/ 510

Dated: 13th December, 2021

Shri. Mukulendu Pandey,
DGM, POWERGRID
400KV Berhampore Switching Station, Dakshingram
Palsanda, Murshidabad, West Bengal -742238

Subject: Approval for energization of Bypassing of 400 kV Farakka-Kahalgaon Ckt-3 and 400 kV S/C Farakka Durgapur Ckt-2 existing Transmission lines from NTPC, Farakka so as to form 400 kV D/C Kahalgaon-Durgapur Transmission Line under Reg.43 of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulation 2010

- Ref: i) Your application no. B/2021/00942 Dated: 07/12/2021
ii) Inspection Report : RIO/ER/Ins. Report/Powergrid-Farakka/2021/495 Dated: 07/12/2021
iii) Compliance uploaded in Application Portal,

Whereas the inspection of bypassing of 400 kV Farakka-Kahalgaon Ckt-3 and Ckt-4 and 400 kV S/C Farakka Durgapur Ckt-1 and Ckt-2 existing Transmission lines from NTPC, Farakka so as to form 400 kV D/C Kahalgaon-Durgapur Transmission Line was carried by the undersigned on 06/12/2021 and inspection report was issued vide letter in Ref.(ii). Now compliance of our observation has been received vide letter in Ref.(iii)

Approval is hereby granted to energize Bypassing of 400 kV Farakka-Kahalgaon Ckt-3 and 400 KV S/C Farakka Durgapur Ckt-2 existing Transmission lines from NTPC, Farakka so as to form One Circuit of 400 KV D/C Kahalgaon-Durgapur Transmission Line. The approval is subject to Consistent compliance of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulation 2010 as amended till date.

The above installation shall be due for periodical inspection under Reg. 30 within two years from the date of issue of this approval



20/12/2021
(S.R. Tudu)

Electrical Inspector
to Government Of India



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GOVERNMENT OF INDIA
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MINISTRY OF POWER, CENTRAL ELECTRICITY AUTHORITY
क्षेत्रीय निरीक्षण संगठन
REGIONAL INSPECTORIAL ORGANISATION

No. RIO/ER/Approval (2)/Powergrid-Farakka/2021/ 783

Dated: 25th March, 2022

Shri. Mukulendu Pandey,
DGM, POWERGRID
400KV Berhampore Switching Station, Dakshinigram
Palsanda, Murshidabad, West Bengal -742238

Subject: Approval for energization of Bypassing of 400 kV Farakka-Kahalgaon Ckt-3 and 400 kV S/C Farakka Durgapur Ckt-2 existing Transmission lines from NTPC, Farakka so as to form 400 kV D/C Kahalgaon-Durgapur Transmission Line under Reg.43 of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulation 2010

- Ref:** i) Your application no. B/2021/00942 Dated: 07/12/2021
 ii) Inspection Report : RIO/ER/Ins. Report/Powergrid-Farakka/2021/495 Dated: 07/12/2021
 iii) Approval for Ckt-1: RIO/ER/Approval(1)/Powergrid-Farakka/2021/510 Dated: 13/12/2021
 iv) Compliance submitted for Circuit-1 : ER-IVBHP/ERSS-XXIII/CEA/4303 Dated: 28/12/2021
 v) Provisional Approval for Ckt-1 issued vide email dated: 29th December, 2021

Whereas the inspection of bypassing of 400 kV Farakka-Kahalgaon Ckt-3 and Ckt-4 and 400 kV S/C Farakka Durgapur Ckt-1 and Ckt-2 existing Transmission lines from NTPC, Farakka so as to form 400 kV D/C Kahalgaon-Durgapur Transmission Line was carried by the undersigned on 06/12/2021 and inspection report was issued vide letter in Ref.(ii). Now compliance of our observation for Kahalgaon-Durgapur Circuit-1 has been received vide letter in Ref.(iv)

Approval is hereby granted to energize Bypassing of 400 kV Farakka-Kahalgaon Ckt-4 and 400 KV S/C Farakka Durgapur Ckt-1 existing Transmission lines from NTPC, Farakka so as to form 400KV D/C Kahalgaon-Durgapur Circuit-1 Transmission Line. The approval is subject to Consistent compliance of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulation 2010 as amended till date.

The above installation shall be due for periodical inspection under Reg. 30 within two years from the date of issue of this approval.



(Signature)
 Electrical Inspector
 to Government Of India

18. The Petitioner has submitted the Eastern Regional Load Despatch Centre (ERLDC) Charging Certificate dated 7.6.2022 wherein it has been indicated that the trial run of 400 kV Durgapur-Kahalgaon-1 line had been completed on 31.12.2021 and

successful trial run of 400 kV Durgapur-Kahalgaon-1 line had been completed on 1.1.2022 and the Petitioner has claimed the COD of Asset-1 as 2.1.2022. The Petitioner has also submitted the Self-declaration Certificate dated 7.1.2022 in support of the claimed COD of Asset-1.

19. The Petitioner is directed to clarify how the COD of Asset-1 was claimed on 2.1.2022, when the CEA Energisation Certificate was issued on 25.3.2022 at the time of truing-up. We provisionally approve the COD of Asset-1 as 2.1.2022, and the same will be reviewed at the time of truing-up after the Petitioner submits the clarification of the CEA energisation certificate.

20. Taking into consideration the CEA Energisation Certificate, RLDC Charging Certificate, and Self-declaration Certificate, the COD of the Asset-2 and Asset-3 is approved as 8.4.2022 and 28.4.2022, respectively.

21. It has been observed that the Petitioner has not submitted the CMD Certificate in the case of Assets-1, 2, and 3. The Petitioner is directed to submit the same at the time of truing-up.

Capital Cost

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

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

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

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan,*

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

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

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
- (c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.



- (4) The capital cost in case of existing or new hydro generating station shall also include:
- 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
 - 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:
- The assets forming part of the project, but not in use, as declared in the tariff petition;
 - De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

- 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;
- Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- 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."

23. The Petitioner has submitted the Auditor's Certificate dated 16.6.2022 and 29.6.2022 and has claimed the Capital Cost incurred as on COD and Additional Capital Expenditure (ACE) projected to be incurred in respect of the transmission assets, which are as follows:

Assets	FR Apportioned Approved Cost	RCE Apportioned Approved Cost	Expenditure up to COD	Projected ACE			Estimated Completi on Cost as on 31.3.2024
				2021-22	2022-23	2023-24	
Asset-1	2434.45	2296.63	1716.80	151.89	319.35	181.50	2369.54
Asset-2	3176.42	4400.95	3598.66	0.00	626.38	114.90	4339.94
Asset-3	18378.34	16479.20	14021.98	0.00	1423.95	695.64	16141.57
Total	23989.21	23176.78	19337.44	151.89	2369.68	992.04	22851.05

(₹ in lakh)

Cost Overrun

24. The Petitioner has submitted that the total apportioned approved cost as per FR of ₹23989.21 lakh against the estimated completion cost as on 31.3.2024 is ₹22851.05 lakh. There was a cost overrun with respect to the FR apportioned approved cost in the case of Asset-2. However, there was no cost overrun on an overall basis. The Petitioner, in this regard, has submitted that the cost variation was mainly due to actual site conditions, awarded rate, and other associated factors that were beyond the control of the Petitioner.

25. Further, the Petitioner has submitted the RCE vide affidavit dated 6.9.2023. The Petitioner has submitted that with respect to RCE apportioned cost, there is no cost overrun in the Asset-II. However, with respect to Asset-I, there is an apparent cost overrun with respect to the RCE apportioned cost, whereas there is no cost overrun with respect to the FR apportioned approved cost. The reason for the same is the decrease in the amount of actual ACE incurred as against the higher estimated amount as provided in the Auditor's Certificate. There is a net decrease in the project cost wherein FR cost was ₹23989 lakh, and the subsequent RCE cost is ₹23177 lakh. The following table shows the comparison of the RCE cost against the FR-approved cost:

Sr. No.	Variation on account of:	Variation	
		(₹ in lakh)	(in %)
(i)	Price Variation		
a	DPR to LOA for approved scope (on competitive bidding while awarding)	(-) 867	(-) 3.61
b	Provision presently kept as per contract price variation clause by Region.	834	3.47
	Sub-Total (PV)	(-) 33	(-) 0.14
(ii)	Variation in quantity of approved items	(-) 650	(-) 2.71
(iii)	Variation in infrastructure items	368	1.53
(iv)	Compensation	(-) 901	(-) 3.76



Sr. No.	Variation on account of:	Variation	
		(₹ in lakh)	(in %)
	Sub-Total (i to ii)	(-) 1217	(-) 5.07
(iv)	Other Reasons (IEDC and IDC)		
A	IEDC (incl. Contingencies)	889	3.70
b	IDC	(-) 485	(-) 2.02
	Sub- Total (IEDC & IDC)	404	1.68
	GRAND TOTAL	(-) 813	(-) 3.39

26. The Petitioner has submitted the reasons for cost overrun/under-run/variation for the transmission project as under:

(a) Price Variation (PV) (Net decrease of ₹33 lakh: (-)0.14 %)

There has been a decrease in the cost of the transmission project by ₹33 lakhs on this account, which works out to (-)0.14% of the approved cost as per the following details:

- (i) It has been noted from the above table that the amount of (-) ₹867 lakhs has been incurred from the time of IA of the transmission project till the award of various contracts (DPR to LoA) for approved scope based on prices received as per transparent, competitive bidding and further price variation amount of ₹834 lakhs is kept in line with the contract price variation clause.
- (ii) With respect to PV from DPR to LoA, the contracts for all the packages under the transmission project were awarded only after the approval of the competent authority as per the DoP to the lowest evaluated and responsive bidder on the basis of competitive bidding by the Petitioner.

(iii) Further, a provision of ₹834 lakhs has been envisaged for price variation, ranging from @ 7% to 10% on balance PV applicable supply items, as per a contractual clause in LoAs.

(b) Variation in quantity of approved items (Net decrease of ₹650 lakh: 2.71 %)

(i) In the RCE, the quantities of various Sub-station and transmission line equipment and civil works have been considered as per the actual site requirement and the latest amendments.

(ii) With respect to the transmission line, the line length and type of various towers and foundations in the DPR were estimated on the basis of a walk-over/preliminary survey. However, during the execution of the transmission project, there has been a decrease in the line length from 44 km to 42 km, and the quantities of tower steel, foundation, etc., are considered as per the actual site conditions and design.

(iii) The overall major variation due to the change in the quantities is as under:

• Tower Steel (Supply and erection)	: (-) ₹366 lakhs
• Conductor & Insulators	: (-) ₹237 lakhs
• Concreting & Reinforcement	: (-) ₹195 lakhs
• Excavation	: (-) ₹38 lakhs
• Stringing	: (-) ₹12 lakhs
• Destraining	: (-) ₹5 lakhs
• OPGW Cable	: (-) ₹2 lakhs

(iv) With respect to the Sub-station, there has been an increase in the quantities of the civil works like RCC, PCC, reinforcement steel, etc. with respect to DPR (FR) envisaged quantities, resulting in a net increase in the cost of the transmission project by ₹61 lakhs.

(v) Further, there has been an increase in project cost by ₹144 lakhs due to the increase in the cost of the infrastructure works. In the DPR, there was a lump sum provision of ₹80 lakhs (₹20 lakhs per Sub-station) as per the standard norms for miscellaneous infrastructure works at various Sub-stations in the transmission project. In the RCE, an amount of ₹224 lakh has been provisioned for the site as per the actual requirement against the various works like construction of a boundary wall, repairing of the damaged roads, construction of brick pedestal, etc.

(vi) Further, there is an increase in the project cost by ₹368 lakhs due to the addition of cost against the certain infrastructure works pertaining to the store, open store yard, platform with earth filling, etc.

(c) Compensation for Transmission Lines (Net decrease of ₹901 lakh:(-) 3.76 %)

(i) From the approved DPR cost of ₹1957 lakhs under this head, an amount of ₹1056 lakhs has been incurred/likely to be incurred, resulting therein a decrease of ₹901 lakhs in the cost of the transmission project as under:

(₹ in lakh)			
Description	As per DPR	As per RCE	Remarks
i) Compensation towards Crop, Tree, PTCC, Hutment, etc.	241	912	Crop and Tree compensation of ₹ 241 lakhs in DPR was approved @ 5 lakh/km on a normative basis, which now in RCE works out to ₹912 lakhs.
ii) Compensation towards Forest	26	63	Based on the actual payment for 2.1904 Ha of forest area encountered. There has been an increase in the forest area from 1 Ha envisaged as per DPR to 2.1904 Ha as per the actual forest area encountered. Further, the rate for compensatory afforestation has

Description	As per DPR	As per RCE	Remarks
			also substantially increased from 1.4 lakh per Ha as considered in DPR to 4.45 lakh per Ha as per the demand note of Additional PCCF (CAMPA) cum Nodal Officer (FCA), Bihar.
iii) Compensation towards Tower Base and diminution of land value in the width of the Right of Way (RoW) Corridor	1690	81	As per actual/anticipated amount.
TOTAL	1957	1056	

(d) Variation in IDC/IEDC (Net increase of ₹404 lakhs: 1.68%)

Total IDC and IEDC under the transmission project had increased by ₹265 lakhs in comparison to the approved cost, which works out to 10.81% as per the following break-up:

A. Increase in Incidental Expenditure During Construction (IEDC)

As per the IA, the IEDC, including contingencies for the transmission project, was estimated at ₹250 lakhs on total COD cost (i.e., IEDC @10.75% and contingency @3% on total COD cost), whereas, in the RCE, it is had been considered as actual up to Q-II of 2022-23, and further on element-wise amount @ 13.75% (10.75%-IEDC+3%-Contingency) up to commissioning (i.e. up to January 2023) and contingency @ 3% on balance expenditure after commissioning of the project for FY-2022-23, FY- 2023-24 and 2024-25, now works out to ₹557 lakhs (20.71% of the total COD cost) resulting therein an increase of ₹307 lakhs.



B. Decrease in Interest During Construction (IDC)

IDC for the transmission project as per the IA was estimated at ₹110 lakhs, whereas, based on the actual and envisaged funds flow, the IDC for the transmission project in the RCE works out to ₹68 lakhs. Thus, there is a decrease of (-) ₹42 lakhs in IDC.

27. BSPHCL has submitted that the reason given by the Petitioner for the cost overrun of Asset-2 is vague, and the details and supporting documents in this regard have not been provided; thus, cost overrun with respect to Asset-2 may not be considered. Further, the claims contrary to the applicable regulation may not be considered.

28. *Per contra*, the Petitioner has submitted that all details along with supporting documents have been provided along with the Petition. The Petitioner has further submitted that there is the cost overrun in the case of Asset-2 only; there is no overall cost overrun in comparison to FR-approved cost. The cost variation was mainly due to the actual site conditions, awarded rate and other associated factors which were beyond the control of the Petitioner. The item-wise cost variation/ over-run is provided in the Form-5 of the individual assets. Further, the RCE of the transmission project has been submitted vide affidavit dated 6.9.2023 along with the detailed justification of cost variation/ overrun. Therefore, the tariff may be allowed on the estimated completion cost up to 31.3.2024.

29. We have considered the submissions made by the Petitioner and BSPHCL.

30. As compared with the FR-approved cost, the estimated completion cost as on 31.3.2024 of Asset-1 and Asset-3 are within FR cost. As compared with FR cost, the

estimated completion cost as on 31.3.2024 of Asset-2 is at variance for about ₹1163.52 lakhs. The Petitioner has placed on record the copy of the RCE duly approved by the CMD on 8.8.2023. The RCE of the transmission project is ₹23177 lakh, including an IDC of ₹203 lakh based on the March 2023 price level. Based on the RCE, the Petitioner has re-apportioned the cost of the individual assets, according to which the estimated completion cost of Asset-1 is at variance for about ₹104.84 lakh, and the estimated completion cost as on 31.3.2024 of Asset-2 and Asset-3 is within the RCE approved cost. The Capital Cost of Asset-1 is restricted to the revised apportioned approved cost.

31. As per the IA, the FR apportioned approved cost of the transmission project is ₹23989 lakh, and as per the RCE, the RCE approved cost of the transmission project is ₹23177 lakh. It has been observed that as compared with the FR-approved cost, the overall project cost has been reduced by ₹812 lakh. The Petitioner is directed to submit the reasons for taking approval of RCE when the cost for the overall project has been reduced, at the time of truing-up.

32. In the case of Asset-3, we have reviewed Form-5 and observed that the cost variation is on the higher side, and the Petitioner is directed to clarify the reasons for the higher cost with the valid documentary proof at the time of the truing-up.

(₹ in lakh)			
Particulars	Cost as per original estimate	Actual capital expenditure	Variation
Sub-station Auxiliaries	438.12	722.05	283.93
Overheads (Establishment, Audit and Accounts, contingency, other over heads)	378.08	766.85	388.77



Time Overrun

33. As per the IA dated 11.7.2020, the SCOD for the transmission assets was within 11 months from the date of IA. However, the transmission assets were put into commercial operation as follows:

Assets	SCOD	COD	Time over-run
Asset-1	10.6.2021	2.1.2022	206 days
Asset-2		8.4.2022	302 days
Asset-3		28.4.2022	322 days

34. The Petitioner has submitted the following reasons for the delay in commissioning of the transmission assets:

Asset-1:

35. The Petitioner has submitted the following major reasons for the delay in the construction of the transmission line associated with Asset-1.

(i) Delay due to the COVID-19 Pandemic

Due to the outbreak of the COVID-19 pandemic, the Government (Centre and State) imposed the lock down in all the cities and restricted the movement from one place to another. The movement restriction affected the critical supply chain, transportation, worker/ labour absenteeism due to illness/quarantine/ migration, etc, which resulted in a complete halt of ongoing projects and voluntary step back of construction workers, which was unforeseen and unavoidable. The sites were closed or access was largely restricted as a result of measures to contain the COVID-19 outbreak. The contractors, thus, were not able to carry out the works as a result of actions by governments to prevent the spread of the outbreak. Specific COVID-19 related challenges, delivery issues, worker absenteeism due to illness, delayed issuance of permits, travel instructions, and loss of time or

inefficiencies due to the need to practice social distancing on the job site are just a few of the issues that had schedule consequences. The lack of engineering and technical support and supply chain disruptions were the major factors impacting the project schedule and implementations. Thus, the commissioning of various projects, including the subject project, faced delays due to the squeezing of supply lines and construction activities. When the construction resumed, additional delays and inefficiencies further pushed back the completion dates as the construction could not be started immediately. The biggest hurdle is that the supply chain is not fully restored. Besides considering the scenario that if anybody gets infected on the construction site after the work has started, the area would be sealed and all related people will be quarantined for 14-28 days. Therefore, the construction pace plummeted or came to a grinding halt. The administrative action/FIR lodged against the sub-contractors added to the lethargic pace of progress. With the halting of various line construction activities, the work was at a standstill position for almost 4-5 months (i.e., from the end of March 2020 to July 2020) and gradually gathered speed in line with Government directives. Also, in April 2021, the same situation arose, and similar measures were taken by State/UT governments to curb the pandemic, which disrupted the supply chain and manpower and again, the Ministry of Power (MoP), Government of India, vide circular No. 3.1.2020 Trans. dated 12.6.2021 stated that all Inter-state projects which are under construction with SCOD after 1.4.2021, will get an extension of 3 months in respect of the SCOD.

36. The Petitioner vide affidavit dated 20.11.2023 has submitted the status of the transmission project as on 25.3.2020 and 1.4.2021 in accordance with the MoP letters



dated 27.7.2020 and 12.6.2021, respectively, along with the percentage of work completed pre-COVID-19 pandemic and activities impacted due to the COVID-19 Pandemic. The details of the same are as follows:

Status as on 25.3.2020:

(a) The IA dated 11.7.2020 was granted during the COVID-19 Pandemic in 2020 to the Petitioner and the Petitioner had to face a lot of hurdles due to the 2020 lockdown situation. The majority of the work completion was affected during the COVID-19 lockdown; the displacement of migrant workers left the factories and workplaces shutdown. Due to limited social movement, there were restrictions on transportation, and the work could not be initiated at the required place, leading to a delay in the completion of the transmission project on time.

Status as on 1.4.2021

(b) The status of work completed with respect to Asset-1 is as under:

Activity	Unit	Total Quantity	Actual Completed	Balance
Route Alignment	km	3.19	3.19	0.00
Detailed survey	km	3.19	3.19	0.00
Check survey	km	3.19	3.19	0.00
Foundation	nos.	13.00	13.00	0.00
Tower Erection	nos.	13.00	4.00	9.00
Stringing	km	3.19	0.00	3.19

After the resolution of the RoW issues due to high compensation demand on 22.3.2021, the balance tower erection and stringing work commenced. However, due to the sudden rise of 2nd wave of the COVID-19 Pandemic from the month of May, 2021 onwards, the construction work was again severely hampered, which was beyond the control of the Petitioner.



(i) Non-working conditions at the site due to severe Water logging and increase in water level in the feeder canal.

The transmission line construction working site was situated just near to Farakka Feeder Canal. Due to the continuous heavy rainfall in the nearby areas of Farakka during the last week of September 2021, the water level in the Farakka feeder canal increased drastically, and the complete working site was severely waterlogged due to a flash flood-like situation. The work was completely halted from 25.9.2021 to 5.10.2021. The same situation was again encountered during the last week of October 2021.

(ii) Delay due to serve RoW issues faced during the foundation works:

From the commencement of the construction work of the transmission line, severe RoW issues had been encountered by the farmers/landowners, and the work had been completely halted from 31.10.2021 due to high compensation demand, which was communicated to the district administration from time to time. The work resumed on 11.11.2021 but again stopped due to severe RoW issues at Loc 3/0 on 18.11.2021. The foundation work again resumed on 2.12.2021.

(iii) Delay due to stoppage of Tower erection work at Loc 1/0 by Local miscreants.

Tower erection at Loc 1/0 was stopped on 8.1.2021 by local miscreants with their illegitimate demand of money, which was communicated to the SDO, Jangipur, SDPO, Jangipur and I/C-Farakka PS. After the intervention of the local administration, the work was resumed on 28.1.2021.

(iv) Delay due to high compensation demand by the land owners.

The work was regularly stopped by the landowner on the grounds of high compensation demand. As per the India Telegraph Act 1885 Part-II, the

compensation amount is only payable for standing crops and trees damaged in the RoW issues of the transmission line. Moreover, the recommendation of the MoP issued through the guidelines dated 15.10.2015 for compensation for the damages due to RoW issues has not been implemented by the Government of West Bengal. However, considering the severe local agitation on the grounds of compensation and stoppage of work from 5.2.2021, the Petitioner approached various local authorities for the determination of the market value of the lands falling under various Mouzas in which the transmission line was constructed. The work was completely stopped from 5.2.2021 to 22.3.2021.

(v) Delay in stringing work between AP 7/0 to AP 8/0 due to severe ROW by land owners.

The Stringing work commenced between AP 7/0 to AP 8/0. The work in the said section was stopped by the landowners from 6.7.2021 to 7.7.2021 and again from 10.7.2021 to 29.7.2021. The matter was taken up with SDPO, Farakka, and I/C-Farakka and was resolved with the intervention of I/C-Farakka, and subsequently work resumed.

(vi) Delay due to Bharat Bandh, Assembly Election in Murshidabad (West Bengal) etc.:

The work was stopped on 8.12.2020 and 26.3.2021 due to Bharat Bandh and on 26.4.2021 due to the assembly election in Murshidabad (West Bengal).

(vii) Delay due to repeated thefts in the under-construction transmission line.

The repeated thefts at various towers, i.e., parts and hardware fittings of the transmission line, were encountered during the month of October 2021. An FIR has been lodged by the executing agency at Farakka PS on 3.11.2021 regarding the theft of a huge quantity of tower members at Loc AP 5/0. Due to specific



designs supplied by the agencies, the arrangement of extra materials for replenishment of theft led to a delay in the final completion of the transmission line.

37. The Petitioner has submitted the chronology to justify the delay in the execution of Asset-1 as under:

Sr. No.	Issue for stoppage	Affected period		Days
		From	To	
1	Bharat Bandh	8.12.2020	8.12.2020	1
2	RoW	8.1.2021	28.1.2021	21
3	RoW	5.2.2021	22.3.2021	46
4	Elections in Murshidabad	26.4.2021	26.4.2021	1
5	Bharat Bandh	26.3.2021	26.3.2021	1
6	COVID-19	16.5.2021	30.6.2021	46
7	RoW	6.7.2021	7.7.2021	2
8	RoW	10.7.2021	29.7.2021	20
9	COVID-19	5.8.2021	12.9.2021	39
10	Water Logging	25.9.2021	5.10.2021	11
11	Water Logging	22.10.2021	31.10.2021	10
12	Theft	26.10.2021	26.11.2021	32
13	RoW	31.10.2021	11.11.2021	12
14	RoW	18.11.2021	2.12.2021	15

38. BSPHCL has submitted that the reasons for delay given by the Petitioner do not explain the delay that has been occasioned in the instant Petition, and the same may not be condoned.

39. BSPHCL has further submitted as under:

- a. The claim of delay on account of the COVID-19 Pandemic is not available to the Petitioner in as much as the IA of the transmission project was accorded by the BoD of the Petitioner on 11.7.2020, when the unlock guidelines came in place and, admittedly, the work gathered speed in line with the government directives. The alleged halting of the work from the



end of March 2020 to July 2020 may not be considered. The Petitioner, in the instant Petition, has also not demonstrated how the particular assets/project was impacted and has submitted only generalized statements. Further, despite the relaxations granted by various government circulars from time to time, the failure of the contractors to work cannot be said to be an uncontrollable factor. Nothing has been mentioned about the mitigative steps taken by the Petitioner, especially at the time of the IA; the Petitioner was already aware of the pandemic situation and fixed the SCOD being fully cognizant of the situation. Further, if at all, the MoP circular dated 12.6.2021 granted an extension of three months, but the delay claimed with respect to Asset-1, Asset-2, and Asset-3 are 206, 302, and 322 days, respectively.

- b. The reason for water-logging and increase in water level in the feeder canal, with respect to Asset-1 is only an excuse for the inefficient planning and execution on the part of the Petitioner. Therefore, the same may not be accepted. This reason pertaining to the period 25.9.2021 to 5.10.2021 was much after the SCOD. The Petitioner was always aware of the situation of the construction work site and ought to have had the necessary preparedness in place to deal with the alleged eventuality. The Petitioner has neither stated anything about the reasonable care and prudent utility practices adopted by it nor has he furnished any supporting document regarding the adverse weather condition.
- c. The reason given for the RoW issues faced during the foundation work with respect to Asset-1 is unacceptable as the Petitioner does not explain



the delay for the claimed time period. The letters submitted in the Petition are for the year 2020, and the claims of the Petitioner are for the year 2021, which is unsubstantiated. Some resistance on account of RoW issues ought to be in contemplation of the Petitioner and it cannot be claimed as a completely unforeseeable circumstance. Therefore, the delay due to ROW issues may not be condoned.

- d. The delay due to the alleged stoppage of tower erection work at Loc 1/0 due to high compensation demand by the landowners and the delay in the stringing work between AP 7/0 and 8/0 due to RoW issues by the landowners are problems usually encountered in the construction and cannot be said to be unforeseeable. These alleged problems were neither prolonged nor continuous. Therefore, the claim of the delay on these grounds is not liable to be considered.
- e. The claim of delay due to Bharat Bandh, Assembly Elections, etc., is not liable to be condoned. The Petitioner has not demonstrated how the concerned assets/project were impacted on these counts.
- f. The claim of delay due to alleged repeated thefts in the under-construction transmission line is also not liable to be condoned as only one alleged incident has been cited by the Petitioner, and the claim of the repeated thefts is unsubstantiated. Additionally, it was the Petitioner and its contractor's responsibility to have the necessary security arrangements at the sites to avoid such eventuality. Nothing has been mentioned by the Petitioner regarding the site management, despite which the alleged incident occurred.

40. In response, while denying the submissions of BHPHCL, the Petitioner has reiterated its submissions made in the Petition. In addition, the Petitioner has submitted as follows:

- a) The reasons and justifications for the delay given in the instant Petition were beyond the control of the Petitioner as the events associated with the delay were unforeseen. Though the various problems occurring concurrently could have delayed the transmission project enormously, the experience and expertise of the Petitioner in the project planning and execution curtailed the delay through efficient and relentless efforts. Accordingly, the delay in the completion of the transmission assets may be condoned.
- b) Keeping in view the situation of the COVID-19 pandemic, the MoP vide its letter dated 27.7.2020, stated that the construction activities at various project sites had been severely affected and granted 5 months extension to the ISTS projects. In extension to the above, the MoP vide its letter dated 12.6.2021 again stated that the construction activities at various project sites have been severely affected by the second wave, measures like night curfew, imposition of Section 144, and weekend and complete lockdown steps taken by the Government. Hence, all the ISTS projects under construction with SCOD after 1.4.2021 will get an extension of 3 months in respect of the SCOD.
- c) The delay due to water logging was a consequence of an increase in the water level in the feeder canal at Farakka due to unprecedented rainfall from September 2021 to October 2021, which was usually the lean rainfall



season, i.e., post-monsoon period. Thus, the rainfall was not only unprecedented but was also unseasonal, which could not have been envisaged at the planning stage.

- d) The RoW issues have been classified as a force majeure event, and thus, the contention of BSPHCL that the delay due to RoW is liable to be rejected is highly misplaced. The movement of vehicles was restricted as a precautionary measure as normally major roads were blocked by locals and miscreants during the elections and Bharat bandh, which hampered the work at the construction site. The detailed reasons for the delay, along with relevant annexures, have already been provided in the Petition.

41. As per the documents provided by the Petitioner, it is observed that for limiting the fault level at the Farakka 400 kV generation switchyard, the transmission project was approved in the 2nd meeting of the Eastern Region Standing Committee of Transmission (ERSCT) held on 5.7.2019. Further, in the 6th meeting of the National Committee on Transmission (NCT) held on 30.9.2019, it was agreed that the works may be recommended to be implemented under the RTM route. The said scheme was also agreed upon in the 1st meeting of the Eastern Region Power Committee (Transmission Planning) (ERPCTP) held on 14.2.2020. The prior approval of the government under Section 68 of the Electricity Act 2003 for transmission lines, including the Eastern Region System Strengthening -XXIII, was accorded by CEA on 13.5.2020.

Time overrun analysis and decision in the case of Asset-1

42. We have considered the submission of the Petitioner and BSPHCL and have gone through the documentary evidence produced on record to justify the time overrun.



43. As per the IA dated 11.7.2020, the SCOD of Asset-1 was 10.6.2021 and it was commissioned on 2.1.2022 with a time overrun of 206 days. The Petitioner has claimed delay on account of the COVID-19 pandemic, water logging issues, RoW issues, stoppage of erection work due to nuisance created by the landowners and high compensation demand by the landowners, delay due to stringing work, Bharat bandh, assembly elections and thefts of various equipment. The item-wise time over-run has been analysed in the succeeding paragraphs.

Delay due to the COVID-19 Pandemic:

44. The Petitioner has submitted that Asset-1 was delayed due to the COVID-19 (2nd wave) related lockdown and restrictions. The MoP vide letter dated 12.6.2021 has extended the SCOD of the Inter-State transmission projects by three months due to the COVID-19 Pandemic. The relevant portion of the letter dated 12.6.2021 is as follows:

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

Sir,

I am directed to state that transmission utilities have approached this Ministry stating that construction activities at various transmission project sites have been severely affected by the current second wave of COVID-19 pandemic and various measures have been taken by the State/UT Governments to contain the pandemic such as night curfew, imposition of Section 144, weekend lockdown and complete lockdown. In this regard they have requested for extension of Scheduled Commercial Operation Date (SCOD) to mitigate the issues of disruption in supply chains and manpower, caused due to COVID-19 pandemic.

2. The matter has been examined in the Ministry and it has been noted that unlike last year complete lockdown in the entire Country, this time different States/UTs have ordered lock-down in their States/UTs as per their own assessments. Therefore, after due consideration, it has been decided that;

i. All inter-state transmission projects, which were under construction with SCOD coming after 01 April 2021, shall get an extension of three (3) months in respect of their SCOD.

ii. The commencement date of Long Term Access (LTA) to a generator by CTU based on completion of transmission line, whose SCOD is extended by three (3) months due to COVID-19 as mentioned above at point (i), shall also be automatically extended by three (3) months."



45. The IA of the transmission project was approved on 11.7.2020 with the SCOD within 11 months, i.e., by 10.6.2021. Also, as per Form-5A, as submitted by the Petitioner, the work for the transmission project was awarded to Larsen and Toubro Limited (L&T) Chennai on 15.7.2020. Therefore, as the transmission project was under construction as on 1.4.2021 and with SCOD of 10.6.2021, the relief granted under the MoP letter dated 12.6.2021 is applicable to the present case, and the 3-month delay (92 days) on account of the COVID-19 pandemic is condoned.

Delay Due to severe water-logging & increase in water level in the Feeder Canal:

45. The Petitioner has submitted that the time period from 25.9.2021 to 5.10.2021 (11 days) and 22.10.2021 to 31.10.2021 (10 days) is affected due to water-logging. The Petitioner has not submitted any documentary evidence in support of the same. Due to the non-submission of any documentary evidence, the time overrun from 25.9.2021 to 5.10.2021 and 22.10.2021 to 31.10.2021, i.e., approx. 21 days claimed by the Petitioner is not condoned.

Delay due to Severe RoW issues faced during the construction activities:

46. The Petitioner has submitted that the construction work was hampered at various stages due to severe RoW issues created by the local miscreants and land owners for their illegitimate demands of money. The Petitioner took up the matter with the Local administrative and police authorities vide letter dated 9.11.2020, 18.11.2020, 11.1.2021, 13.1.2021 and 10.7.2021. The Petitioner vide letter dated 8.2.2021 also requested the local administrative authority to issue the directive regarding categorisation and rate of affected land in line with the guidelines issued by the MoP dated 15.10.2015 for modalities to be adopted for payment of compensation towards damage in regard to RoW, as the said guidelines were not implemented by the Government of West Bengal.



The Petitioner vide letter dated 22.2.2021 also requested the local concerned authority to provide land value based on the market value for the mouzas coming in alignment for the construction of the transmission line at Farakka in Murshidabad District. The Petitioner had made all the efforts to resolve the issue of local miscreants and the land owners under the RoW issues with the help of local administration and the police department. However, it is observed that the Petitioner has not submitted any documentary evidence that the matter of RoW issues for the period from 31.10.2021 to 11.11.2021 and 18.11.2021 to 2.12.2021 was taken up by the Petitioner with the local administration to resolve the issue.

47. The Petitioner has claimed a delay of about 116 days on account of RoW problems in the case of Asset-1. It is noted that we had already condoned the time over-run up to 10.9.2021 on account of the COVID-19 (2nd wave) Pandemic. The time period beyond 10.9.2021 impacted on account of RoW problems, i.e., from 31.10.2021 to 11.11.2021 (12 days) and 18.11.2021 to 2.12.2021 (15 days) has not been condoned due to non-submission of the documentary evidence.

Delay due to Bharat Bandh, Assembly Election in Murshidabad (West Bengal) etc.:

48. The Petitioner has submitted that due to Bharat Bandh on 8.12.2020 and 26.3.2021 called by the farmers and declaration of assembly elections in Murshidabad (West Bengal) on 26.4.2021, the work was temporarily halted. We observe that the progress of work may have been disrupted due to Bharat Bandh call on 8.12.2020 and 26.3. 2021. The progress of work may have also been affected due to the participation of the local manpower/workforce in casting the votes on the election day, i.e., on 26.4.2021. Therefore, in view of the facts, the time period of 3 days i.e. 8.12.2020, &

26.3.2021 due to Bharat Bandh and 26.4.2021 due to elections in Murshidabad (West Bengal) is hereby condoned.

Delay due to Theft:

49. The Petitioner has submitted that due to the specific design supplied by the agencies, the arrangement of extra material due to theft led to the delay in the final completion of the transmission line. The FIR was also lodged by the executing agency. However, the arrangement of proper security of materials during the construction activities is the responsibility of the executing agency, and any theft of material at the site is due to security lapses. Therefore, the time overrun of 32 days i.e. from 26.10.2021 to 26.11.2021, as claimed by the Petitioner, is not condoned.

50. Keeping in view the above-stated reasons and considering the overlapping of time periods of different constraints and having analysed the submissions of the Petitioner and BSPHCL, the summary of the time overrun condoned and not condoned with respect to Asset-1 is as under:

Asset-1	SCOD as per IA	Actual COD	Time over-run claimed	Time over-run condoned	Time overrun not condoned
	10.6.2021	2.1.2022	206 days	92 days	114 days

Reasons for time over-run in case of Asset-2

51. The Petitioner has submitted the following major reasons for the delay of 302 days in commissioning of Asset -2 vis-à-vis the SCOD.

Delay due to the COVID-19 Pandemic:

52. The Petitioner has submitted similar facts and hurdles faced during the execution of Asset -2 with respect to the COVID-19 pandemic, which were submitted earlier under Asset-1. The same has not been repeated here for the sake of brevity.



53. The Petitioner has also submitted the status of the transmission project as on 25.3.2020 and 1.4.2021, along with the percentage of work completed pre-COVID-19 pandemic and activities impacted due to the COVID-19 pandemic vide affidavit dated 20.11.2023 which are discussed in the succeeding paragraphs.

Status as on 25.3.2020:

54. The IA was granted during the COVID-19 Pandemic in 2020 to the Petitioner and they had to face a good deal of hurdles due to the 2020 lockdown situation.

Status as on 1.4.2021

55. Yard levelling and approximately 70% of foundation work were completed by 1.4.2021. The balance foundation, erection of equipment, and commissioning activities were pending.

Delay due to Bihar Assembly Elections 2020:

56. Bihar Assembly Elections 2020 in Muzaffarpur district constituencies were held on 3.11.2020. During the election period, construction work was disturbed and delayed due to the non-availability of manpower and difficulties in the free movement of the vehicles in the last 7 days the Bihar elections (3.11.2020 to 10.11.2020).

Delay due to the YASS cyclone:

57. Due to the YASS cyclone, heavy rainfall occurred in Saharsa and Supal District on 26.5.2020 and 27.5.2022, and most of the locations became waterlogged; as a result, the work was delayed from 26.5.2021 to 31.5.2021 for total 6 days.

Delay due to waterlogging and flooding:

58. During the monsoon in the State of Bihar, which extended from May 2021 to August 2021, particularly, high rainfall was experienced. This resulted in flooding of the



construction site in Muzaffarpur. All the civil construction activities were at a complete standstill during the said period owing to cable trench flooding. The events in chronological manner justifying the delay in execution of Asset-2 as submitted by the Petitioner are as under:

Sr. No.	Issue for stoppage	Affected period		Days
		From	To	
1	Bihar Assembly Elections	3.11.2020	10.11.2020	7
2	YASS Cyclone	26.5.2021	31.5.2021	6
3	Water Logging and Flooding	1.7.2021	31.8.2021	56
4	2 nd wave of COVID-19 Pandemic	1.4.2021	30.6.2021	91

59. BSPHCL, vide affidavit dated 16.10.2023, has submitted that the delay claimed on account of Bihar Assembly Elections in 2020 with respect to Assets-2 is not liable to be condoned as the assembly elections are not unanticipated events and the Petitioner ought to have factored it. Further, the impact on the assets/project concerned has not been stated. Similarly, the claim of delay on account of the gram panchayat election in the Supaul and Saharsa districts is liable to be rejected. The same also pertains to the period much after SCOD. BSPHCL has further submitted that the Petitioner should have demonstrate the reasons for the delay claimed on account of the YASS cyclone, failing which, the delay on YASS cyclone, should not be condoned. Further, as per the Petitioner, its impact was limited. BSPHCL has submitted that the reasons for water-logging and flooding given are not liable to be considered, since the Petitioner has not stated that the rains were unanticipated. Therefore, the necessary preparations to deal with the monsoon had not been made by the Petitioner. Further, there are no supporting documents with respect to the alleged claim of flooding.



60. In response, the Petitioner has reiterated its submission with respect to Bihar Assembly Elections as it has stated for Asset-1. The Petitioner has further submitted that the cyclonic disturbances and rains could not be foreseen, and thus, anticipating the same and envisaging the preparedness of works on this event was not plausible. Thus, the contention of BSPHCL in this regard is unwarranted.

Time overrun analysis and decisions in the case of Asset-2:

61. We have considered the submissions of the Petitioner and BSPHCL. We have gone through the documentary evidence produced on record by the Petitioner to justify the time overrun. As per the IA dated 11.7.2020, the SCOD of the transmission project was 11 months. Accordingly, the SCOD of the transmission project works out to be 10.6.2021, against which the instant asset is put into commercial operation on 8.4.2022 with a delay of 302 days.

62. The Petitioner has claimed a delay on account of the COVID-19 pandemic, waterlogging and flooding issues, Bihar Assembly Elections, and the YASS cyclone.

Delay due to the COVID-19 Pandemic:

63. With respect to the delay claimed by the Petitioner on account of the COVID-19 pandemic, it has been observed that the MoP vide letter dated 12.6.2021 has extended the SCOD of the inter-State transmission projects by 3 months respectively due to the COVID-19 Pandemic. The relevant portion of the letter dated 12.6.2021 has been mentioned in the analysis part of Asset-1 above.

64. As per the affidavit dated 20.11.2023 filed by the Petitioner, yard levelling and approximately 70% of the work was completed on 1.4.2021. Balance foundation, erection, and commissioning activities were pending as of dated 1.4.2021 in



accordance with the MoP letter 12.6.2021. Therefore, it has been observed that the work was under progress, and the SCOD of the transmission asset was scheduled on 10.6.2021 (as per the IA), i.e., after 1.4.2021 and, hence, the extension of 3 months as per the MoP letter dated 12.6.2021, in respect of SCOD is applicable for the instant case. Therefore, the time period of 92 days is condoned.

Delay due to Bihar Assembly Election 2020 (in Muzaffarpur district constituencies):

65. The Petitioner has submitted that the construction work was hampered for 7 days, i.e., from 3.11.2020 to 10.11.2020, due to Bihar Assembly Election 2020 in Muzaffarpur district constituencies.

66. It is observed that the documentary evidence to show how the General Assembly Election affected the construction activities for 7 days has not been submitted by the Petitioner. However, considering that the progress of work may have been affected due to the participation of the local manpower/workforce in casting their votes on the election day, i.e., on 3.11.2020, One (01) Day on account of delay due to Bihar Assembly Election 2020 is hereby condoned.

Delay due to the YASS cyclone:

67. The Petitioner has submitted that due to the YASS cyclone, there was heavy rainfall on 26.5.2021 and 27.5.2021, and most of the locations became waterlogged; as a result, the work was delayed from 26.5.2021 to 31.5.2021, i.e., for 6 days. However, no documentary evidence has been submitted by the Petitioner to show that the said event may be considered a Force Majeure event as per the 2019 Tariff Regulations. Therefore, the time overrun 6 days claimed by the Petitioner is not condoned.



68. It further has been observed that the time overrun of the transmission asset due to the second wave of the COVID-19 pandemic has already been condoned, and the revised SCOD after the consideration of three months is 10.9.2021. Therefore, the time over-run on this count did not impact the commissioning of the transmission asset. Accordingly, the time overrun of 6 days is not condoned.

Delay due to waterlogging and flooding:

69. The Petitioner has submitted that all the civil construction activities were at a standstill due to flooding at the construction site in Muzaffarpur for 56 days owing to cable trench flooding during the monsoon in the state of Bihar, which extended from May 2021 to August 2021, particularly high rainfall was experienced. However, no documentary evidence for the same has been submitted by the Petitioner. Therefore, the time period of 56 days claimed by the Petitioner is not condoned.

70. Further, it has been observed that the time overrun of the transmission asset due to the second wave of the COVID-19 pandemic has already been condoned, and the revised SCOD after the consideration of three months is 10.9.2021. Therefore, the time overrun on this count did not impact the commissioning of the transmission asset. Accordingly, the time overrun of 56 days is not condoned.

71. Keeping in view the above-stated reasons and having analysed the submissions of the Petitioner and BSPHCL, the summary of the time overrun condoned and not condoned is as under:

Asset-2	SCOD as per IA	Actual COD	Time over- run claimed	Time over- run condoned	Time overrun not condoned
	10.6.2021	8.4.2022	302 days	93 days	209 days

Reasons for Time overrun in the case of Asset-3:

72. The Petitioner has submitted the following major reasons for the delay of 322 days in the commissioning vis-à-vis the SCOD for Asset-3:

Delay due to the COVID-19 Pandemic:

73. The Petitioner has submitted similar facts and hurdles faced during the execution of Asset-3 due to the COVID -19 pandemic, which has been mentioned under Asset-1 and Asset-2 of the instant Petition. The same are not repeated here for the sake of brevity.

74. The Petitioner has also submitted the status of the transmission project as on 25.3.2020 and 1.4.2021, along with the percentage of work completed pre-COVID-19 pandemic. In the transmission line portion, the supply of tower structures was completed. Approximately 60% of the foundation and 20% of the tower erection work were completed by 1.4.2021. In the Sub-station portion, only yard levelling was completed by 1.4.2021.

Delay due to Bihar Assembly Elections 2020:

75. Seven (7) days (from 03.11.2020 to 10.11.2020): Bihar Assembly election 2020 in Muzaffarpur district constituencies which was held on 3.11.2020. During the election period, construction work was disturbed and delayed due to non-availability of manpower and difficulties in free movement of vehicles in 7 days of the election date, i.e., from 3.11.2020 to 10.11.2020.

Delay due to Severe RoW issues during Construction of Line:

76. The severe RoW issues occurred during the construction of LILO of the Kishanganj-Darbhanga transmission line at Saharsa (New) Sub-station, which were



cleared with the help of District Administration and Police support. The total time overrun of 234 days has been claimed on this count, and the details of the same are as under:

Sr. No.	Issue for stoppage	Affected period		Days
		From	To	
1	RoW in Commencement of foundation work	8.9.2020	24.9.2020	17
2	RoW 12/0 FDN LO	13.10.2020	26.10.2020	14
3	RoW FDN 19/0 LI	9.3.2021	13.5.2021	66
4	RoW Stringing work 7/0-11/0	10.10.2021	31.10.2021	22
5	RoW FDN 2/3 LI	3.7.2021	15.9.2021	75
6	RoW Stringing work 10/0 - 11/0 LI	16.2.2022	14.3.2022	27
7	RoW Stringing work 12/0 - 13/0 LO	2.1.2022	14.1.2022	13
TOTAL DELAY				234

Delay due to waterlogging and flooding:

77. Most of the locations in Bihar were waterlogged during the monsoon and required heavy dewatering due to high rainfall in Bihar from May 2021 to August 2021. Non-concurrent period of delay owing to waterlogging and flooding was 35 days.

Delay due to non- availability of 11/33 kV shutdown during the stringing work (from 15.1.2022 to 20.1.2022 and 22.2.2022 to 28.2.2022):

78. The stringing work was affected due to the non-approval of various 11/33 kV feeders by NBPDCCL for stringing work. Also, shutdown was provided only for 5-6 hours on a daily basis after approval for the stringing work. Hence, the delay occurred in stringing work in different sections of the LILO line. The details of the delay that occurred due to the non-availability of the 11/33 kV feeder shutdown are as under:

Delay due to non – availability of 11 / 33 kV feeder shutdown			
	From	To	No. of Days
33 kV S/D AP 3/0-4/0 LI (NBPDCCL)	15.1.2022	20.1.2022	6
33 kV S/D AP 12/0-13/0 LO & 13/0-14/0 LI (NBPDCCL)	22.2.2022	28.2.2022	7



Delay due to Scarcity of Earth for executing earth filling

79. The levelling activities at the site involve around 1.64 lakh cubic metres of earth filling. However, due to the scarcity of soil in the said area owing to the flood-prone area, the same was delayed. All related activities, viz., pile, SPR, equipment foundation, and cable trench were also subsequently delayed.

Delay due to YASS Cyclone:

80. The YASS cyclone resulted in heavy rainfall from 26.5.2021 to 31.5.2021 in Saharsa and Supaul District, due to which most of the locations became water-logged. As a result, the work was delayed from 26.5.2021 to 31.5.2021, i.e., a total of 6 days.

Delay due to Gram Panchayat Elections in Supaul and Saharsa District:

81. The Gram Panchayat Election 2021 in Saharsa and Supaul district under Sattar Kataiya and Supaul Block held on 20.10.2021 and 12.12.2021, respectively. During the election period, the construction work was affected due to the non-availability of manpower and difficulties in the free movement of vehicles before the election, resulting in a total delay of 12 days, i.e., from 17.10.2021 to 22.10.2021 and 10.12.2021 to 15.12.2021 in each district, i.e., Saharsa and Supoul, respectively.

82. The chronology justifying the delay in execution of Asset-3 as submitted by the Petitioner is as under:

Sr. No.	Issue for stoppage	Affected period		Days
		From	To	
1	COVID-19	5.8.2021	12.9.2021	39
2	COVID – 19	16.5.2021	30.6.2021	46
3	Bihar Assembly Elections	3.11.2020	10.11.2020	7
4	RoW in Commencement of foundation work	8.9.2020	24.9.2020	17
5	RoW 12/0 FDN LO	13.10.2020	26.10.2020	14
6	RoW FDN 19/0 LI	9.3.2021	13.5.2021	66
7	RoW Stringing work 7/0-11/0	10.10.2021	31.10.2021	22
8	RoW FDN 2/3 LI	3.7.2021	15.9.2021	75



Sr. No.	Issue for stoppage	Affected period		Days
		From	To	
9	RoW Stringing work 10/0 - 11/0 LI	16.2.2022	14.3.2022	27
10	RoW Stringing work 12/0 - 13/0 LO	2.1.2022	14.1.2022	13
11	Water Logging and Flooding	27.7.2021	31.8.2021	35
12	Delay due to non-availability of 11/33 kV feeder shutdown- 33 kV S/D AP 3/0-4/0 LI (NBPDCCL)	15.1.2022	20.1.2022	6
13	Delay due to non-availability of 11/33 kV feeder shutdown- 33 kV S/D AP 12/0-13/0 LO & 13/0-14/0 LI (NBPDCCL)	22.2.2022	28.2.2022	7
14	Scarcity of earth for executing earth filling	-	-	-
15	YASS Cyclone	26.5.2021	31.5.2021	6
16	Gram panchayat elections	17.10.2021	22.10.2021	6
17	Gram panchayat elections	10.12.2021	15.12.2021	6

83. BSPHCL has submitted the same reasons for the Bihar Assembly Elections, YASS Cyclone, and water logging and flooding as submitted for time overrun in the case of Asset-2. Therefore, the same has not been repeated here. Further, BSPHCL has submitted that the claim of delay due to the alleged RoW issues, the details of the steps taken by the Petitioner for resolution of the alleged issues are not mentioned, and it has not been stated as to why the same was not taken earlier to avert the RoW issues, which are common in such construction projects. BSPHCL has further submitted that there is not much of a delay due to the non-availability of the 11/33 kV shutdown during the stringing work. The Petitioner ought to give ample public notice for shutdown, and here, the requests were given only on 10.1.2022 and 14.2.2022. BSPHCL has also submitted that the claim of delay on account of the alleged scarcity of earth for executing earth filling is also liable to be rejected as much as the same ought to have been in



contemplation of the Petitioner and the lack of planning and preparedness in this regard is attributable to the Petitioner.

84. In response, the Petitioner has submitted the same reasons for the Bihar Assembly Elections, YASS Cyclone, and water logging and flooding as for Asset-2. The same is not repeated here. Further, the Petitioner has submitted that, at times, RoW issues are unprecedented. To cater to such issues, due communications with the local authorities were maintained to avoid the delay. The approval of the shutdown of 11/33 kV lines was not under the control of the Petitioner. The COD of Asset-3 is claimed as 28.4.2022 by the Petitioner, and requests for shutdown were sent well before time. The Petitioner has further submitted that the site levelling activities involve around 1.64 lakh cubic metres of earth filling. However, due to the scarcity of soil in the said area owing to the flood-prone area, the same was delayed. All the related activities, viz., pile, SPR, equipment foundation, and cable trench, were also subsequently delayed.

Time overrun analysis and decision in the case of Asset-3:

85. We have considered the submission of the Petitioner and BSPHCL. As per the IA dated 11.7.2020, the SCOD of Asset-3 was 10.6.2021. The Petitioner has submitted the actual COD as 28.4.2022. The time overrun in commissioning of the transmission Asset-3 is 322 days in the commissioning vis-à-vis the SCOD. The Petitioner has claimed the delay on account of the COVID-19 Pandemic, water logging issues, RoW issues, delay due to stringing work, assembly, and gram panchayat elections, and the YASS cyclone. We have considered the submissions of the Petitioner and have gone through the documentary evidence produced on record to justify the time overrun.



Delay due to the COVID-19 Pandemic:

86. With regards to the delay claimed by the Petitioner due to the COVID-19 Pandemic, it is observed that the MoP vide letter dated 12.6.2021 has extended the SCOD of the inter-State transmission projects by 3 months respectively due to the COVID-19 Pandemic. The relevant portion of the letter dated 12.6.2021 has been re-produced during analyses of Asset-1.

87. The Petitioner, vide affidavit dated 20.11.2023, has submitted that in the transmission line portion, the supply of tower structures was completed. Approximately 60% of the foundation and 20% of the tower erection work were completed by 1.4.2021. In the Sub-station portion, only yard levelling was completed by 1.4.2021. Balance foundation, erection, and commissioning activities were pending as on 1.4.2021 in accordance with the MoP letter 12.6.2021. Therefore, it has been observed that the work was under progress, and also, the SCOD of the transmission asset was on 10.6.2021 (as per IA), i.e., after 1.4.2021 and, hence, as per MoP letter dated 12.6.2021, the extension of 3 months in respect of the SCOD is applicable in the instant case. Therefore, the time period of 92 days is condoned.

Delay due to Bihar Assembly Election 2020 (in Muzaffarpur district constituencies):

88. The Petitioner has submitted that the construction work was hampered for 7 days, i.e., from 3.11.2020 to 10.11.2020, due to the Bihar Assembly Elections 2020 in Muzaffarpur district constituencies, which was held on 3.11.2020.

89. It is observed that the documentary evidence to indicate how the General Assembly Election affected the construction activities for 7 days has not been submitted

by the Petitioner. However, considering that the progress of work may have been affected due to the participation of the local manpower/workforce in casting their votes on the election day, i.e., on 3.11.2020, One (01) Day on account of delay due to the Bihar Assembly Election 2020 is hereby condoned.

Delay due to Severe RoW during Construction of Line:

90. The severe RoW issues arose during the construction of LILO of Kishanganj – Darbhanga transmission line at Saharsa (New) Sub-station, which were cleared with the help of local administration and Police support. The Petitioner has claimed the time over-run of 234 days on account of severe RoW issues due to the cutting of the big mango garden and issues created by the land owners during the construction and stringing activities of the transmission line. The details of the time period affected due to RoW issues as submitted by the Petitioner are as follows:

Sr. No.	Issue for stoppage	Affected period		Days
		From	To	
1	RoW in Commencement of foundation work	8.9.2020	24.9.2020	17
2	RoW 12/0 FDN LO	13.10.2020	26.10.2020	14
3	RoW FDN 19/0 LI	9.3.2021	13.5.2021	66
4	RoW FDN 2/3 LI	3.7.2021	15.9.2021	75
5	RoW Stringing work 7/0-11/0	10.10.2021	31.10.2021	22
6	RoW Stringing work 10/0 - 11/0 LI	16.2.2022	14.3.2022	27
7	RoW Stringing work 12/0 - 13/0 LO	2.1.2022	14.1.2022	13
		Total		234 Days

91. We have considered the submissions of the Petitioner and gone through the supporting documents submitted by the Petitioner. It has been observed that the executing agency, i.e., L&T of the Petitioner, intimated the RoW issues which impeded the progress of the work vide letters dated 13.10.2020, 9.3.2021, 3.7.2021, 10.10.2021,

2.1.2022 and 16.2.2022. Consequently, the Petitioner confirmed the resolution of RoW issues and provided clearance to the executing agency to proceed with the work vide letters dated 27.10.2020, 14.5.2021, 16.9.2021, 1.11.2021, 16.1.2022 and 15.3.2022.

The details of correspondence in respect of various RoW issues are as follows:

Date	From	To	Remarks
13.10.2020	Larsen and Toubro Limited	The Petitioner	Regarding the forceful stoppage of work by the villagers
27.10.2020	The Petitioner	Larsen and Toubro Limited	The Petitioner intimated that the RoW issue was resolved at the site.
9.3.2021	Larsen and Toubro Limited	The Petitioner	Regarding forceful stoppage of work and nuisance created by the villagers
14.5.2021	The Petitioner	Larsen and Toubro Limited	The Petitioner intimated that the RoW issue was resolved at the site.
3.7.2021	Larsen and Toubro Limited	The Petitioner	Regarding forceful stoppage of work and nuisance created by the villagers
4.7.2021	The Petitioner	Sub Inspector, Adarsh Thana	Regarding critical RoW issue
16.9.2021	The Petitioner	Larsen and Toubro Limited	The Petitioner intimated that the RoW issue was resolved at the site.
10.10.2021	Larsen and Toubro Limited	The Petitioner	Regarding non-clearance to commence stringing work and non-completion of tree-cutting
1.11.2021	The Petitioner	Larsen and Toubro Limited	The Petitioner intimated that the RoW issue was resolved at the site.
2.1.2022	Larsen and Toubro Limited	The Petitioner	Informed the Petitioner regarding work getting stuck due to the non-cutting of a big mango garden and severe RoW created by a local contractor
16.1.2022	The Petitioner	Larsen and Toubro Limited	RoW and tree-cutting work was completed.
16.2.2022	Larsen and Toubro Limited	The Petitioner	Informed the Petitioner regarding work getting stuck due to the non-cutting of the big mango garden
15.3.2022	The Petitioner	Larsen and Toubro Limited	Tree cutting was completed



92. Based on the details of the correspondence, it is evident that the progress of work was hampered due to various RoW issues faced by the Petitioner during the construction and stringing activities. Therefore, we are of the view that the time overrun of 234 days claimed by the Petitioner on account of RoW problems at various locations was beyond the control of the Petitioner.

93. Further, it has been observed that the time overrun of 167 days has been subsumed under the time over-run on account of the COVID-19 pandemic (2nd wave) which we have already condoned and extended the SCOD of Asset-3, i.e., by 10.9.2021.

94. Therefore, in view of the above, the net impact of time over-run of 67 days due to various RoW issues faced by the Petitioner during construction and stringing work at various locations is hereby condoned.

Delay due to waterlogging and flooding:

95. The delay of 35 days was due to the waterlogging at most of the locations during the high rainfall in Bihar from May 2021 to August 2021. However, no document has been submitted by the Petitioner to depict the direct effect of high rainfall on the progress of construction activities. Also, the Petitioner is expected to ensure the proper arrangement for dewatering in water logging conditions at the sites during the monsoon season. Therefore, the time overrun of 35 days claimed by the Petitioner is not condoned.

Delay due to non- availability of 11/33 kV shutdown during the stringing work (from 15.1.2022 to 20.1.2022 & 22.2.2022 to 28.2.2022):

96. The stringing work was affected due to the non-approval of shutdown at various 11/33 kV feeders by NBPDCCL for stringing work. It has been observed that the Petitioner has requested for the shutdown from 17.2.2022 to 20.2.2022 and 15.1.2022 to



19.1.2022 vide letter dated 14.2.2022 and 10.1.2022, respectively. However, the documentary evidence that the NABDCL was not granted the shutdown for the desired period has not been submitted by the Petitioner. Therefore, the time overrun of 13 days claimed by the Petitioner due to the non-availability of the shutdown is not condoned.

Delay due to scarcity of soil for executing earth filling:

97. The site levelling activities at site involve around 1.64 lakh cubic metres of earth filling, and due to scarcity of soil, the same was delayed. Therefore, all the related activities, viz., pile, SPR, equipment foundation, and cable trench were also subsequently delayed. However, the Petitioner has not submitted the documents in support of its submission and not claimed any time overrun. Thus, the said reason for the delay is not condoned.

Delay due to YASS Cyclone:

98. The time over-run of 6 days due to the YASS cyclone resulted in heavy rainfall from 26.5.2021 to 31.5.2021. However, no documentary evidence has been submitted by the Petitioner to depict that the said event may be considered under Force Majeure event as per the 2019 Tariff Regulations. Therefore, the time overrun of 6 days claimed by the Petitioner is not condoned.

Delay due to Gram Panchayat Elections in Supoul and Saharsa District (12 days from 17.10.2021 to 22.10.2021 and from 10.12.2021 to 15.12.2021):

99. The Petitioner has submitted that due to the non-availability of manpower and difficulties in the free movement of vehicles before the election during the Gram Panchayat Election 2021 in Saharsa and Supoul Districts under Sattar Kataiya and Supoul Block held on 20.10.2021 and 12.12.2021 respectively, the progress of work was disrupted and total delay 12 days, i.e. 6 days from 17.10.2021 to 22.10.2021 and



06 days from 10.12.2021 to 15.12.2021 in Saharsa and Supoul district respectively happened.

100. It is observed that no documentary evidence has been submitted by the Petitioner to show the direct impact of Gram Panchayat Elections on the construction activities. However, considering that the Progress of work may have been affected due to the participation of Local manpower/workforce in the casting of votes on 20.10.2021 & 12.12.2021, the time delay of 2 days, i.e. 20.10.2021 & 12.12.2021 out of 12 days on account of Gram Panchayat Elections in Supoul and Saharsa districts is hereby condoned.

101. Keeping in view the above-stated reasons and considering the overlapping of time over-run due to different constraints and having analysed the submissions of the Petitioner and BSPHCL, the summary of the time over-run condoned and not condoned is as under:

Asset-3	SCOD as per IA	Actual COD	Time over-run claimed	Time over-run condoned	Time overrun not condoned
	10.6.2021	28.4.2022	322 days	162 days	160 days

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

102. The Petitioner has claimed IDC of the transmission assets and has submitted the statement showing IDC claim, discharge of IDC liability as on the COD and thereafter, as under:

(₹ in lakh)				
Assets	IDC as per Auditor's Certificate	IDC Discharged up to COD	IDC discharged during 2021-22	IDC discharged during 2022-23
Asset-1	29.47	29.42	0.04	0.00
Asset-2	64.98	64.65	0.00	0.33
Asset-3	108.75	67.49	0.00	41.26



103. We have considered the submissions of the Petitioner, as discussed above in this order; the time overrun in the commissioning of the transmission assets has been partially condoned. Accordingly, the IDC on a cash basis up to the COD has been worked out based on the loan details given in the statement showing the discharge of IDC and Form-9C for the transmission assets. The IDC claimed and considered as on COD and summary of discharge of IDC liability up to COD and, thereafter, for the purpose of tariff determination subject to revision at the time of truing up is as follows:

(₹ in lakh)

Assets	IDC as per Auditor's Certificate (A)	IDC Disallowed (B)	IDC Allowed (C)=(A)-(B)	Undischarged IDC (D)	IDC allowed on COD (E)=(C)-(D)
Asset-1	29.47	8.30	21.17	1.18	19.99
Asset-2	64.98	7.69	57.29	3.86	53.43
Asset-3	108.75	21.20	87.55	20.06	67.49

104. The Petitioner has claimed IEDC for the transmission assets as per the Auditor's Certificate and was paid up to the COD. As the time overrun for the transmission asset has been partially condoned, IEDC has been allowed on a pro-rata basis. The IEDC claimed as per the Auditor's Certificate, IEDC considered and discharged up to the COD as under:

(₹ in lakh)

Assets	IEDC claimed as per Auditor's certificate (A)	IEDC disallowed due to time over-run not condoned (B)	IEDC Allowed (A-B)
Asset-1	407.90	86.11	321.79
Asset-2	766.85	252.00	514.85
Asset-3	2493.98	608.29	1885.69



Initial Spares

105. 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 ceiling norms:

“(d) Transmission System

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

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

(₹ in lakh)				
Assets	Particulars	Capital cost for calculation of Initial Spares	Initial Spares claimed	Ceiling limit as mentioned as per Regulation (in %)
Asset-1	Transmission Lines	1288.00	12.36	1.00
	Sub-station (Brownfield)	621.85	21.66	6.00
	PLCC/Communication System	51.25	7.75	3.50
Asset-2	Sub-station	3508.11	164.40	6.00
Asset-3	Transmission Lines	10790.63	105.03	1.00
	Sub-station (Brownfield)	2695.81	40.86	6.00
	PLCC/Communication System	211.20	7.10	3.50

107. The Petitioner has submitted the Initial Spares discharge statement with the Petition.

108. BSPHCL has submitted that only claims in accordance with Regulation 23 of the 2019 Tariff Regulations may be considered. In response, the Petitioner has submitted



that the individual and overall cost of the Initial Spares are well within the ceiling limit, and the same may be allowed as claimed.

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

Assets	Particulars	Plant and Machinery cost (excluding IDC/IEDC, Land cost and Cost of Civil Works) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2019 Tariff Regulations (in %)	Initial Spares allowable (₹ in lakh)	Excess Initial Spares disallowed (₹ in lakh)	Initial Spares Allowed (₹ in lakh)
		A	B	C	$D=(A-B)*C/(100-C)$	E=B-D	
Asset-1	Transmission Lines	1288.00	12.36	1.00	12.89	0.00	12.36
	Sub-station (Brownfield) + PLCC	673.10	29.41	6.00	41.09	0.00	29.41
Asset-2	Sub-station	3508.11	164.40	6.00	213.43	0.00	164.40
Asset-3	Transmission Lines	10790.63	105.03	1.00	107.94	0.00	105.03
	Sub-station (Brownfield) + PLCC	2907.01	47.96	6.00	182.49	0.00	47.96

110. Therefore, the capital cost allowed as on COD is as under:

(₹ in lakh)

Assets	Capital Cost claimed as on COD (Auditor's Certificate) (A)	IDC Disallowed (B)	Undischarged IDC as on COD (C)	IEDC Disallowed (D)	Initial Spares Disallowed (E)	Undischarged Initial Spares (F)	Capital Cost as on COD (G) = (A-B-C-D-E-F)
Asset-1	1716.80	8.30	1.18	86.11	0.00	0.00	1621.21
Asset-2	3598.66	7.69	3.86	252.00	0.00	0.00	3335.11
Asset-3	14021.98	21.20	20.06	608.29	0.00	0.00	13372.43



Additional Capital Expenditure ("ACE")

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

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

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

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

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

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

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

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

- (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- (b) Change in law or compliance of any existing law;*
- (c) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (d) Liability for works executed prior to the cut-off date;*
- (e) Force Majeure events;*
- (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;*
- (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."*

112. The Petitioner has claimed that the ACE incurred/projected to be incurred, mainly on account of the balance/retention payments and works deferred for execution. Hence, the same is claimed in accordance with Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations. The Petitioner has claimed the capital cost as per the cash IDC discharge as on 31.3.2024, and the same is as under:

(₹ in lakh)

Assets	Capital Cost as on COD	Projected ACE 2019-24			Capital Cost as on 31.3.2024
		2021-22	2022-23	2023-24	
Asset-1	1716.80	151.89	319.35	181.50	2369.54
Asset-2	3598.66	0.00	626.38	114.90	4339.94
Asset-3	14021.98	0.00	1423.95	695.64	16141.57

113. The Petitioner, vide affidavit dated 3.3.2023, has submitted that there is no expenditure expected beyond 2024-25. However, the ACE is on the anticipated basis, and the actual ACE will be submitted at the time of true-up of the 2019-24 tariff period based on the actual expenditure incurred and spillover, if any.

114. The Petitioner vide affidavit dated 3.3.2023 has also submitted the liability flow statement, and the same is as follows:

Asset-1

Description	Party Name	Particulars	Outstanding as on COD	Discharge				Additional Liability
				2021-22	2022-23	2023-24	Total (2019-24)	2019-24
Upgradation of 400 kV	Vikran Engineering	Sub-station	94.82	11.89	22.50	31.50	65.89	0.00

Description	Party Name	Particulars	Outstanding as on COD	Discharge				Additional Liability	
				2021-22	2022-23	2023-24	Total (2019-24)	2019-24	
Line Bay Equipment's	and Exim Pvt. Ltd.								
Description	Party Name	Particulars	Outstanding as on COD	Discharge				Work deferred	
				2021-22	2022-23	2023-24	2019-24	20221-22	2022-23
Bypassing of 400 kV D/C Farakka-Kahalgaoon (Ckt-3 & Ckt-4) and 400 kV D/C Faraka - Durgapur (Ckt-1 & Ckt-2)	Compensation	Transmission Line		0.00	0.00	0.00	0.00	10.00	0.00
	M/S L&T and etc.	Transmission Line	333.73	55.00	178.73	100.00	333.73	25.00	17.17
	M/s Vikarant Engg. Etc.	Sub-station/PLCC	50.00	0.00	0.00	50.00	50.00	50.00	100.95
Total				66.89	201.23	181.50	449.62	85.00	118.12

Asset-2

Party Name	Particulars	Outstanding as on COD	Discharge				Additional Liability	
			2021-22	2022-23	20223-24	Total (2019-24)	2019-24	
Vikran Engineering and Exim Pvt. Ltd.	Sub-station	741.28	0.00	626.38	114.90	741.28	0.00	
Total			0.00	626.38	114.90	741.28	0.00	

Asset-3

Party Name	Particulars	Outstanding as on COD	Discharge				Additional Liability	
			21-22	22-23	23-24	Total (19-24)	22-23	
Vikran Engineering and Exim Pvt. Ltd.	Sub-station	1020.56	0.00	116.00	695.64	811.64	204.00	
M/s L&T	Transmission Line	803.95	0.00	803.95	0.00	803.95	300.00	
Total			0.00	919.95	695.64	1615.59	504.00	

115. BSPHCL has submitted that the claims in accordance with Regulation 24 of the 2019 Tariff Regulations and the definition of the cut-off date given therein may be considered subject to prudence check as per Regulation 24(2) of the 2019 Tariff Regulations. In response, the Petitioner has reiterated its submission.

116. We have considered the submissions of the Petitioner and BSPHCL. The projected ACE to be incurred is mainly on account of the balance/retention payments and the works deferred for execution. Hence, the same is allowed in accordance with Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations. ACE allowed, including un-discharged IDC, is as under:

(₹ in lakh)				
Asset	Particulars	2021-22	2022-23	2023-24
Asset-1	ACE	151.89	319.35	181.50
	Undischarged IDC	0.04	1.14	0.00
	Total	151.93	320.49	181.50
Asset-2	ACE		626.38	114.90
	Undischarged IDC		0.33	3.53
	Total		626.71	118.43
Asset-3	ACE		1423.95	695.64
	Undischarged IDC		20.06	0.00
	Total		1444.01	695.64
Total ACE		151.93	2390.00	995.19

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

(₹ in lakh)					
Assets	Capital Cost as on COD	Admitted Projected ACE 2019-24			Capital Cost as on 31.3.2024
		2021-22	2022-23	2023-24	
Asset-1	1621.21	151.93	320.49	181.50	2275.13
Asset-2	3335.11		626.71	118.43	4080.25
Asset-3	13372.43		1,444.01	695.64	15512.08

Debt-Equity ratio

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

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

Provided that:

i. where equity actually deployed is less than 30% of the capital cost, actual

- equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
 - iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

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

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

(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 regulation.

(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."



119. The debt-equity ratio considered for the purpose of computation of tariff for the 2019-24 tariff period for the transmission assets is as follows:

Asset-1

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	1134.85	70.00	457.74	70.00	1592.59	70.00
Equity	486.36	30.00	196.18	30.00	682.54	30.00
Total	1621.21	100.00	653.92	100.00	2275.13	100.00

Asset-2

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	2334.58	70.00	521.60	70.00	2856.18	70.00
Equity	1000.53	30.00	223.54	30.00	1224.07	30.00
Total	3335.11	100.00	745.14	100.00	4080.25	100.00

Asset-3

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	9360.70	70.00	1497.75	70.00	10858.45	70.00
Equity	4011.73	30.00	641.89	30.00	4653.62	30.00
Total	13372.43	100.00	2139.65	100.00	15512.08	100.00

Depreciation

120. Regulation 33 of the 2019 Tariff Regulations provides as under:

“33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or



multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system:

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

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

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

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

(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."

121. The depreciation has been worked out considering the admitted capital expenditure as on the COD and thereafter up to 31.3.2024. The weighted average rate of depreciation (WAROD) at Annexure-I for Asset-1, Annexure-II for Asset-2, and Annexure-III for Asset-3 has been worked out as per the rates of depreciation specified in the 2019 Tariff Regulations. The depreciation allowed for the transmission assets is as follows:

Asset-1

(₹ in lakh)			
Particulars	2021-22 (pro-rata 89 days)	2022-23	2023-24
Depreciation			
Opening Gross Block	1621.21	1773.14	2093.62
ACE	151.93	320.49	181.50
Closing Gross Block	1773.14	2093.62	2275.12
Average Gross Block	1697.17	1933.38	2184.37
Weighted average rate of Depreciation (WAROD) (in %)	5.31	5.31	5.30
Balance useful life of the asset (Year)	31	31	30
Lapsed life at the beginning of the year (Year)	0	0	1
Aggregate Depreciable Value	1527.45	1740.04	1965.94
Combined Depreciation during the year	21.98	102.61	115.88
Aggregate Cumulative Depreciation	21.98	124.59	240.47
Remaining Aggregate Depreciable Value	1505.48	1615.45	1725.47

Asset-2

(₹ in lakh)

Particulars	2022-23 (pro-rata 358 days)	2023-24
Depreciation		
Opening Gross Block	3335.11	3961.82
ACE	626.71	118.43
Closing Gross Block	3961.82	4080.25
Average Gross Block	3648.46	4021.03
Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28
Balance useful life of the asset (Year)	25	25
Lapsed life at the beginning of the year (Year)	0	0
Aggregate Depreciable Value	3283.61	3618.93
Combined Depreciation during the year	188.94	212.31
Aggregate Cumulative Depreciation	188.94	401.25
Remaining Aggregate Depreciable Value	3094.67	3217.67

Asset-3

(₹ in lakh)

Particulars	2022-23 (pro-rata 338 days)	2023-24
Depreciation		
Opening Gross Block	13372.43	14816.44
ACE	1444.01	695.64
Closing Gross Block	14816.44	15512.08
Average Gross Block	14094.44	15164.26
Weighted average rate of Depreciation (WAROD) (in %)	5.32	5.32
Balance useful life of the asset (Year)	33	33
Lapsed life at the beginning of the year (Year)	0	0
Aggregate Depreciable Value	12688.50	13652.35
Combined Depreciation during the year	693.77	807.10
Aggregate Cumulative Depreciation	693.77	1500.87
Remaining Aggregate Depreciable Value	11994.72	12151.49

Interest on Loan ("IoL")

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

"32. Interest on loan capital: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting



the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

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

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

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

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

(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."

123. BSPHCL has submitted that the IoL may be calculated as contemplated by Regulation 32 of the 2019 Tariff Regulations only. The 2019 Tariff Regulations do not permit the change in the interest rate due to the floating rate of interest applicable, if any, and the same may be adjusted by the beneficiaries. In response, the Petitioner has reiterated its submission.

124. We have considered the submissions of the Petitioner and BSPHCL. The weighted average rate of IoL (WAROI) has been considered on the basis of the rate



prevailing as on 1.4.2019. The Petitioner has prayed to bill and adjust the impact of IoL on change in the interest rate due to the floating rate of interest applicable, if any, during the 2019-24 tariff period from the beneficiaries. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, the IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL has been allowed as under:

Asset-1

(₹ in lakh)			
Particulars	2021-22 (pro-rata 89 days)	2022-23	2023-24
Gross Normative Loan	1134.85	1241.20	1465.54
Cumulative Repayments up to Previous Year	0.00	21.98	124.59
Net Loan-Opening	1134.85	1219.22	1340.95
Additions	106.35	224.34	127.05
Repayment during the year	21.98	102.61	115.88
Net Loan-Closing	1219.22	1340.95	1352.12
Average Loan	1177.04	1280.09	1346.54
Weighted Average Rate of Interest on Loan (in %)	5.9500	5.9500	5.9500
Interest on Loan	17.08	76.17	80.12

Asset-2

(₹ in lakh)		
Particulars	2022-23 (pro-rata 358 days)	2023-24
Gross Normative Loan	2334.58	2773.28
Cumulative Repayments up to Previous Year	0.00	188.94
Net Loan-Opening	2334.58	2584.33
Additions	438.70	82.90
Repayment during the year	188.94	212.31
Net Loan-Closing	2584.33	2454.93
Average Loan	2459.46	2519.63
Weighted Average Rate of Interest on Loan (in %)	5.9557	5.9557
Interest on Loan	143.67	150.06

Asset-3

Particulars	(₹ in lakh)	
	2022-23 (pro-rata 338 days)	2023-24
Gross Normative Loan	9360.70	10371.51
Cumulative Repayments up to Previous Year	0.00	693.77
Net Loan-Opening	9360.70	9677.73
Additions	1010.81	486.95
Repayment during the year	693.77	807.10
Net Loan-Closing	9677.73	9357.59
Average Loan	9519.22	9517.66
Weighted Average Rate of Interest on Loan (in %)	6.0249	6.0249
Interest on Loan	531.10	573.43

Return on Equity ("RoE")

125. Regulations 30 and 31 of the 2019 Tariff Regulations provide as under:

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

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

Provided that return on equity in respect of additional capitalization after cutoff date beyond the original scope, excluding additional capitalization on 7 account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

Provided further that:

- 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;*
- 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:

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

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

Illustration-

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

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

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

- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is ₹ 1,000 crore;
- (b) Estimated Advance Tax for the year on above is ₹ 240 crore;



(c) Effective Tax Rate for the year 2019-20 = ₹ 240 Crore/₹ 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."

126. BSPHCL has submitted that RoE and Tax on RoE, as contemplated by Regulations 30 and 31 of the 2019 Tariff regulations, may only be taken into consideration. In response, the Petitioner has reiterated its submission.

127. We have considered the submission of the Petitioner and BSPHCL. The Petitioner has submitted that the MAT rate is applicable to it. Accordingly, the MAT rate applicable in 2019-24 has been considered for the purpose of RoE, which will be trued-up in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE has been worked out for the transmission assets and allowed is as follows:

Asset-1

Particulars	(₹ in lakh)		
	2021-22 (pro-rata 89 days)	2022-23	2023-24
Opening Equity (A)	486.36	531.94	628.09
Additions (B)	45.58	96.15	54.45
Closing Equity (C) = (A+B)	531.94	628.09	682.54
Average Equity (D) = (A+C)/2	509.15	580.01	655.31
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782
Return on Equity	23.32	108.94	123.08



Asset-2

(₹ in lakh)

Particulars	2022-23 (pro-rata 358 days)	2023-24
Opening Equity (A)	1000.53	1188.54
Additions (B)	188.01	35.53
Closing Equity (C) = (A+B)	1188.54	1224.07
Average Equity (D) = (A+C)/2	1094.54	1206.31
Return on Equity (Base Rate) (in %)	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782
Return on Equity	201.63	226.57

Asset-3

(₹ in lakh)

Particulars	2022-23 (pro-rata 338 days)	2023-24
Opening Equity (A)	4011.73	4444.93
Additions (B)	433.20	208.69
Closing Equity (C) = (A+B)	4444.93	4653.62
Average Equity (D) = (A+C)/2	4228.33	4549.28
Return on Equity (Base Rate) (in %)	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782
Return on Equity	735.42	854.45

Operation & Maintenance Expenses ("O&M Expenses")

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

Asset-1

(₹ in lakh)

Particulars	2021-22 (pro-rata 89 days)	2022-23	2023-24
Transmission Line			
i. Bypassing of 400 kV D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka-Durgapur (Ckt-1 & Ckt-2)			
Double Circuit (Twin Conductor)			
Normative Rate of O&M Expenses as per Regulation	0.94	0.97	1.01
No. of units (Length in km)	3.19	3.19	3.19
Total O&M Expenses	0.73	3.12	3.23

Asset-2

(₹ in lakh)

Particulars	2022-23 (pro-rata 358 days)	2023-24
Transmission Line:		
i. 220 kV Cable from ICT to GIS bay		
Bays:		
i. Muzaffarpur: ICT 4_ 400 kV Side Main Bay 1_418		
ii. Muzaffarpur: ICT 4 Transformer Bay_214		
Transformer:		
Muzaffarpur: ICT 4 at Muzaffarpur		
400 kV Sub-station (Nos.)	1.00	1.00
Norms (₹ lakh/bay)	35.66	36.91
O&M expenses	34.98	36.91
400 kV Sub-station (Nos.)	1.00	1.00
Norms (₹ lakh/MVA)	0.398	0.411
O&M Expenses	195.18	205.50
220 kV GIS Sub-station (Nos.)	1.00	1.00
Norms (₹ lakh/bay)	17.47	18.08
O&M Expenses	17.14	18.09
Total O&M Expenses	247.41	260.62

Asset-3

(₹ in lakh)

Particulars	2022-23 (pro-rata 338 days)	2023-24
Transmission Line:		
i. 400 kV D/C Saharsa Darbhanga Loop Out Line Ckt 1&2		
ii. 400 kV D/C Saharsa Darbhanga Loop In Line Ckt 1&2		
Bays:		
i. KishanGanj-III Line Bay 419		
ii. Kishanganj-IV Line Bay 422		
iii. Darbhanga-I Line Bay 421		
iv. Darbhanga-I Line Bay 424		
Single Circuit (Bundled Conductor with 4 sub-conductors) (in km)	20.72	20.72
Norms (₹ lakh/km)	0.837	0.867
O&M expenses	16.06	17.96
Double Circuit (Bundle Conductor with 4 sub-conductors) (in km)	18.20	18.20
Norms (₹ lakh/km)	1.466	1.517
O&M Expenses	24.71	27.61
400 kV Sub-station (Nos.)	4.00	4.00
Norms (₹ lakh/bay)	35.66	36.91
O&M Expenses	132.08	147.64
Total O&M Expenses	172.85	193.21



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

“35. Operation and Maintenance Expenses:

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

Particulars	2019-20	2020-21	2021-22 (pro-rata 47 days)	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (₹ 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 (₹ Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586



Particulars	2019-20	2020-21	2021-22 (pro-rata 47 days)	2022-23	2023-24
±500 kV Talcher- Kolar HVDC bipole scheme (₹ Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (₹ Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (₹ 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 (2500 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.”

130. BSPHCL has submitted that the claim of operation and maintenance expenses may only be considered in accordance with Regulation 35(3) (a) of the 2019 Tariff Regulations. In response, the Petitioner has reiterated its submission.

131. We have considered the submissions of the Petitioner and BSPHCL. The O&M Expenses worked out for various elements of the transmission asset as per the norms specified in the 2019 Tariff Regulations, and the same are as follows:

Asset-1

(₹ in lakh)

Particulars	2021-22 (pro-rata 89 days)	2022-23	2023-24
Transmission Line			
ii. Bypassing of 400 kV D/C Farakka Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka Durgapur (Ckt-1 & Ckt-2)			
Double Circuit (Twin Conductor)			
Normative Rate of O&M Expenses as per Regulation	0.94	0.97	1.01
No. of units (Length in km)	3.19	3.19	3.19
Total O&M Expenses	0.73	3.12	3.23

Asset-2

(₹ in lakh)

Particulars	2022-23 (pro-rata 358 days)	2023-24
Transmission Line:		
ii. 220 kV Cable from ICT to GIS bay		
Bays:		
iii. Muzaffarpur: ICT 4_ 400 kV Side Main Bay 1_418		
iv. Muzaffarpur: ICT 4 Transformer Bay_214		
Transformer:		
Muzaffarpur: ICT 4 at Muzaffarpur		
Single Circuit (Single Conductor)	0.42	0.42
Norms (₹ lakh/km)	0.279	0.289
O&M Expenses	0.12	0.12
400 kV Sub-station (Nos.)	1.00	1.00
Norms (₹ lakh/bay)	35.66	36.91



Particulars	2022-23 (pro-rata 358 days)	2023-24
O&M Expenses	34.98	36.91
500 MVA, 400 kV ICT	1.00	1.00
Norms (₹ lakh/MVA)	0.398	0.411
O&M Expenses	195.18	205.50
220 kV GIS Sub-station (Nos.)	1.00	1.00
Norms (₹ lakh/bay)	17.47*	18.08*
O&M Expenses	17.14	18.09
Total O&M Expenses	247.41	260.62

*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

Asset-3

(₹ in lakh)		
Particulars	2022-23 (pro-rata 338 days)	2023-24
Transmission Line:		
iii. 400 kV D/C Saharsa Darbhanga Loop Out Line Ckt 1 & 2		
iv. 400 kV D/C Saharsa Darbhanga Loop In Line Ckt 1 & 2		
Bays:		
v. KishanGanj-III Line Bay 419		
vi. Kishanganj-IV Line Bay 422		
vii. Darbhanga-I Line Bay 421		
Darbhangal Line Bay 424		
Single Circuit (Bundled Conductor with 4 sub-conductors) (in km)	20.72	20.72
Norms (₹ lakh/km)	0.837	0.867
O&M expenses	16.06	17.96
Double Circuit (Bundle Conductor with 4 sub-conductors) (in km)	18.20	18.20
Norms (₹ lakh/km)	1.466	1.517
O&M Expenses	24.71	27.61
400 kV Sub-station (Nos.)	4.00	4.00
Norms (₹ lakh/bay)	35.66	36.91
O&M Expenses	132.08	147.64
Total O&M Expenses	172.86	193.21

132. It is observed that the CEA Energisation Certificate as well as ERLDC Trial Run Certificate is for D/C LOOP-IN and DC LOOP-OUT for LILO of Kishanganj – Darbhanga 400 kV D/C line at Saharsa, whereas the Petitioner has claimed the different



configurations in respect of Line-Out and Line-In portion for O&M Expenses. The Petitioner is directed to submit a detailed justification along with supporting documents for review at the time of truing up.

Interest on Working Capital ("IWC")

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

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

.....

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

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

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

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

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

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

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

capital from any outside agency.”

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

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

134. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2021. The Petitioner has considered the rate of IWC as 10.50%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 10.50% (SBI 1year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points), 10.50% (SBI 1year MCLR applicable as on 1.4.2022 of 7.00% plus 350 basis points) and 12.00% (SBI 1year MCLR applicable as on 1.4.2023 of 8.50% plus 350 basis points) for 2021-22, 2022-23 and 2023-24 respectively. The components of the working capital and interest allowed thereon is as follows:

Asset-1

(₹ in lakh)			
Particulars	2021-22 (pro-rata 89 days)	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	0.25	0.26	0.27
Working Capital for Maintenance Spares (15% of O&M Expenses)	0.45	0.47	0.48
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	32.34	36.34	40.23
Total Working Capital	33.04	37.06	40.98
Rate of Interest (in %)	10.50	10.50	12.00
Interest on Working Capital	0.85	3.89	4.92



Asset-2

(₹ in lakh)		
Particulars	2022-23 (pro-rata 358 days)	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	21.02	21.72
WC for Maintenance Spares (15% of O&M Expenses)	37.84	39.09
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	100.31	106.93
Total Working Capital	159.17	167.74
Rate of Interest (in %)	10.50	12.00
Interest on Working Capital	16.39	20.13

Asset-3

(₹ in lakh)		
Particulars	2022-23 (pro-rata 338 days)	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	15.56	16.10
Working Capital for Maintenance Spares (15% of O&M Expenses)	28.00	28.98
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	288.29	303.69
Total Working Capital	331.85	348.78
Rate of Interest (in %)	10.50	12.00
Interest on Working Capital	32.27	41.85

Annual Fixed Charges for the 2019-24 Tariff Period

135. The transmission charges allowed for the transmission assets for the 2019-24 tariff period are as follows:

Asset-1

(₹ in lakh)			
Particulars	2021-22 (pro-rata 89 days)	2022-23	2023-24
Depreciation	21.98	102.61	115.88
Interest on Loan	17.08	76.17	80.12
Return on Equity	23.32	108.94	123.08
Interest on Working Capital	0.85	3.89	4.92
O&M Expenses	0.73	3.12	3.23
Total	63.96	294.73	327.23

Asset-2

(₹ in lakh)		
Particulars	2022-23 (pro-rata 358 days)	2023-24
Depreciation	188.94	212.31
Interest on Loan	143.67	150.06
Return on Equity	201.63	226.57
Interest on Working Capital	16.39	20.13
O&M Expenses	247.41	260.62
Total	798.05	869.69

Asset-3

(₹ in lakh)		
Particulars	2022-23 (pro-rata 338 days)	2023-24
Depreciation	693.77	807.10
Interest on Loan	531.10	573.43
Return on Equity	735.42	854.45
Interest on Working Capital	32.27	41.85
O&M Expenses	172.86	193.21
Total	2165.41	2470.04

Filing Fee and the Publication Expenses

136. The Petitioner has sought reimbursement of the fee paid by it for filing the Petition and publication expenses.

137. BSPHCL has submitted that the grant of filing fees and expenses incurred is at the discretion of the Commission and need not necessarily be allowed in all cases. Further, nothing beyond what is contemplated by the 2019 Tariff Regulations may be granted.

138. In response, the Petitioner has submitted that they have requested reimbursement of expenditure towards the Petition filing fee and publication expense from the beneficiaries, in terms of Regulation 70(1) of the Tariff Regulations, 2019. The Petitioner has further submitted that the Commission has allowed the recovery of the Petition filing fee and publication of notices from the beneficiaries on a pro-rata basis in



the order dated 28.3.2016 in Petition No. 137/TT/2015 for the determination of tariff for 2014-19 period.

139. We have considered the submissions of the Petitioner and BSPHCL. 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.

Licence Fee & RLDC Fees and Charges

140. 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

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

142. BSPHCL has submitted that Regulation 56 of the 2019 Tariff Regulations contemplates recovery of statutory charges by the generating company and not by the transmission licensee. Therefore, the said claim is premature and liable to be rejected. In response, the Petitioner has reiterated its submission.



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

Security Expenses

144. The Petitioner has submitted that security expenses in respect of the transmission assets are not claimed in the instant Petition, and it would file a separate Petition for claiming the overall security expenses and the consequential IWC as per Regulation 35(3)(c) of the 2019 Tariff Regulations.

145. BSPHCL has submitted that the claim made by the Petitioner regarding the security expenses may only be considered as per Regulation 35(3)(c) of the 2019 Tariff Regulations. In response, the Petitioner has reiterated its submission.

146. We have considered the above submissions of the Petitioner and BSPHCL. 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 the FY 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.

Capital Spares

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



Sharing of Transmission Charges

148. The Petitioner has submitted that the transmission charges in respect of the transmission assets for the 2019-24 tariff period will be recovered on a monthly basis in accordance with Regulation 57 of the 2019 Tariff Regulations and will be shared by the beneficiaries and long term transmission customers as per the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 dated 15.6.2010 and amendment to these Regulations issued vide order dated 30.11.2012 or as amended from to time.

149. BSPHCL has submitted that the sharing of the transmission charges will be done as per the applicable Tariff and Sharing Regulations.

150. We have considered the submissions of the Petitioner and BSPHCL. With effect from 1.7.2011, the sharing of transmission charges for the inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. However, with effect from 1.11.2020 (after the repealing of the 2010 Sharing Regulations), the sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the billing, collection, and disbursement of the transmission charges for the transmission assets shall be recovered in terms of the provisions of the applicable Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

Interim Tariff

151. The Petitioner in the present Petition has prayed for an interim tariff as per Regulation 10(3) of the 2019 Tariff Regulations. We have considered the submission of the Petitioner. Since the tariff has been determined in this Petition for the 2019-24 tariff period, the prayer of the Petitioner for an interim tariff has become infructuous.



152. To summarize, the Annual Fixed Charges (AFC) allowed in respect of the transmission asset for the 2019-24 tariff period are as follows:

Asset-1

(₹ in lakh)			
Particulars	2021-22 (pro-rata 89 days)	2022-23	2023-24
AFC	63.96	294.73	327.23

Asset-2

(₹ in lakh)		
Particulars	2022-23 (pro-rata 358 days)	2023-24
AFC	798.05	869.69

Asset-3

(₹ in lakh)		
Particulars	2022-23 (pro-rata 338 days)	2023-24
AFC	2165.41	2470.04

153. The Annexure(s) to this order form part of the order.

154. This order disposes of Petition No. 15/TT/2023 in terms of the above findings and discussions.

sd/-
(Ramesh Babu V.)
Member

sd/-
(Jishnu Barua)
Chairperson



ANNEXURE-I

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations (in %)	Annual Depreciation as per Regulations (₹ in lakh)		
		2021-22	2022-23	2023-24			2021-22	2022-23	2023-24
Transmission Line	1134.65	90.03	196.70	100.00	386.72	5.28	62.29	69.86	77.69
Sub-station	436.63	61.90	122.29	80.90	265.09	5.28	24.69	29.55	34.92
PLCC	49.93	0.00	1.51	0.60	2.11	6.33	3.16	3.21	3.27
Total	1621.21	151.93	320.49	181.50	653.92		90.13	102.61	115.88
Average Gross Block (₹ in lakh)							1697.17	1933.38	2184.37
Weighted Average Rate of Depreciation (in %)							5.31	5.31	5.30

ANNEXURE-II

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations (in %)	Annual Depreciation as per Regulations (₹ in lakh)	
		2022-23	2023-24	Total			2022-23	2023-24
Sub-station	3335.11	626.71	118.43	745.14	4080.25	5.28%	192.64	212.31
Total	3335.11	626.71	118.43	745.14	4080.25		192.64	212.31
					Average Gross Block (₹ in lakh)		3648.46	4021.03
					Weighted Average Rate of Depreciation (in %)		5.28	5.28

ANNEXURE-III

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations (in %)	Annual Depreciation as per Regulations (₹ in lakh)	
		2022-23	2023-24	Total			2022-23	2023-24
Transmission Line	11339.59	1120.96	-	1120.96	12460.55	5.28%	628.32	657.92
Sub-station	1845.54	322.77	593.95	916.72	2762.25	5.28%	105.97	130.17
PLCC	152.30	0.23	81.40	81.63	233.93	6.33%	9.65	12.23
IT Equipment (Incl. Software)	35.00	0.05	20.29	20.34	55.34	15.00%	5.25	6.78
Total	13372.43	1444.01	695.64	2139.65	15512.08		749.19	807.10
Average Gross Block (₹ in lakh)							14094.44	15164.26
Weighted Average Rate of Depreciation (in %)							5.32	5.32

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Authorised Signatory
Power Grid Corporation of India Ltd
Plot No-2, Sector-29, Gurgaon- 122 001



Order in Petition No. 15/TT/2023

Asset 1.

JAIN PARAS BILALA & CO

Chartered Accountants

Marshall House, 33/1, Netaji Subhas Road, 5th Floor, Room No-507, Kolkata-700001

CERTIFICATE

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost for Bypassing of 400 kv D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400 kv S/C Farakka-Durgapur (Ckt-1 & Ckt-2) existing Transmission Line from NTPC, Farakka so as to form 400 kv D/C Kahalgaon-Durgapur along with upgraded bays at Durgapur SS and Kahalgaon SS Under Eastern region Strengthening Scheme-XXIII in Eastern Region of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 02.01.2022 is detailed as under:

(₹ in Lakhs)					
S/N	Particulars	Capital Cost	IEDC	IDC	Total
1	Expenditure upto 01.01.22(DOCO)	1279.43	407.90	29.47	1716.80
2	Expenditure from 02.01.22 to 31.03.22	84.87			84.87
3	Expenditure from 01.04.22 to 31.03.23	71.82			71.82
4	Expenditure from 01.04.23 to 31.03.24	34.77			34.77
5	Projected Expenditure from 01.04.24 to 31.03.25	59.54			59.54
6	Projected Expenditure from 01.04.25 to 31.03.26	108.65			108.65
	Total	1,639.08	407.90	29.47	2,076.45

* LD was recovered from contractor amounting to ₹11.47 lakhs and have been reduced from the capital cost in the year 2023-24.

We certify that we have verified the expenditure upto 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. (ER II)

The estimated expenditure in Sr No 5 & 6 are based on Management estimate.

Place:- Kolkata

Date:- 20.02.2025

JAIN PARAS BILALA & CO

Chartered Accountants

FRN No-011046C

ASHIS TOSHNIWAL

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Mem No-058521

UDIN - 25058521BMJVDQ5936



JAIN PARAS BILALA & CO

CHARTERED ACCOUNTANTS

MARSHALL HOUSE, 33/1, NETAJI SUBHAS ROAD, 5TH FLOOR, ROOM NO. 507, KOLKATA - 700001

CERTIFICATE

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost for **Bypassing of 400 kv D/C Farakka-Kahalgaoon (Ckt-3 & Ckt-4) and 400 kv S/C Farakka-Durgapur (Ckt-1 & Ckt-2) existing Transmission Line from NTPC, Farakka so as to form 400 kv D/C Kahalgaoon-Durgapur along with upgraded bays at Durgapur SS and Kahalgaoon SS Under Eastern region Strengthening Scheme-XXIII** in Eastern Region of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. **02.01.2022** is detailed as under:

(₹ in Lakhs)

S/N	Particulars	Land (Freehold)	Building and Civil Works	Tr. Line	Sub-Station	OPGW	Communica tion System excl. OPGW	I. T Equipment incl. software, UNMS, URTDMS, EMS, Cyber Security System, REMC, WAMS, SCADA System	Total
1	Expenditure upto 01.01.22 (DOCO)	0.00	0.00	1052.55	381.03	149.00	134.22	0.00	1716.80
2	Expenditure from 02.01.22 to 31.03.22	0.00	0.00	33.29	51.58	0.00	0.00	0.00	84.87
3	Expenditure from 01.04.22 to 31.03.23	0.00	0.00	38.73	31.62	0.00	1.47	0.00	71.82
4	Expenditure from 01.04.23 to 31.03.24	0.00	0.00	0.00	34.17	0.00	0.60	0.00	34.77
5	Projected Expenditure from 01.04.24 to 31.03.25	0.00	0.00	0.00	59.54	0.00	0.00	0.00	59.54
6	Projected Expenditure from 01.04.25 to 31.03.26	0.00	0.00	108.65	0.00	0.00	0.00	0.00	108.65
	Total	0.00	0.00	1233.22	557.94	149.00	136.29	0.00	2076.45

S/N	Particulars	TL (Including OPGW)	Sub-station (Including Communicatio n Equip)
1	Total Cost (Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of Civil works for the purpose of Initial Spares)	1082.77	556.31
2	Initial Spares included above	12.36	29.41

We certify that we have verified the expenditure upto 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. (ER II)

The estimated expenditure in Sr No 5 & 6 are based on Management estimate.

Place:- Kolkata
Date:- 20.02.2025

JAIN PARAS BILALA & CO
Chartered Accountants
FRN No-011046C

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CA Ashis Toshniwal
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UDIN - 25058521BMJVDQ5936



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JAIN PARAS BILALA & CO

Chartered Accountants

Marshall House, 33/1, Netaji Subhas Road, 5th Floor, Room No-507, Kolkata-700001

Certificate Ref. No. ERSS XXIII-02

Dated : 18.02.2025

CERTIFICATE

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost of 01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station under ERSS XXIII in EASTERN REGION TRANSMISSION SYSTEM -I Region of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 08.04.2022 is detailed as under:

(Rs. in Lakhs)

S/N	Particulars	Capital Cost	IEDC	IDC	Total
1	Expenditure upto 31.03.2022	2,766.83	766.85	64.81	3,598.49
2	Expenditure from 01.04.2022 to 07.04.2022 (DOCO:08.04.2022)	-	-	0.17	0.17
3	Expenditure from 08.04.2022 to 31.03.2023	628.36			628.36
4	Expenditure from 01.04.2023 to 31.03.2024	26.54			26.54
5	Expenditure from 01.04.2024 to 31.12.2024	21.98			21.98
6	Estimated Expenditure from 01.01.2025 to 31.03.2025	64.39			64.39
	Total	3,508.10	766.85	64.98	4,339.93

We certify that we have verified the expenditure up to 31.12.2024 as referred above on the basis of the information extracted from the audited Financial Statements/ Information of Power Grid Corporation of India Ltd, Eastern Region-I as on 31.12.2024

The estimated expenditure from 01.01.2025 to 31.03.2025 as stated at serial number "6" above is based on the Management estimate which has been relied upon by us.

Place:- Kolkata

Date:- 18.02.2025

JAIN PARAS BILALA & CO
Chartered Accountants
FRN No-011046C

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UDIN - 25058521BMJVDO1538



JAIN PARAS BILALA & CO
CHARTERED ACCOUNTANTS
MARSHALL HOUSE, 33/1, NETAJI SUBHAS ROAD, 5TH FLOOR, ROOM NO. 507, KOLKATA - 700001

Certificate Ref. No. ERSS XXIII-02

Dated : 18.02.2025

CERTIFICATE

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost of 01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station under ERSS XXIII in EASTERN REGION TRANSMISSION SYSTEM -I Region of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 08.04.2022 is detailed as under:

(Rs. in Lakhs)											
S/N	Particulars	Freehold Land	Leasehold Land	Building and Civil Works	Tr. Line	Sub Station	OPGW	Communication System excl. OPGW	I. T Equipment incl. software, UNMS, URTDSM, EMS, Cyber Security System, REMC, WAMS, SCADA System	Batteries	Total
1	Expenditure upto 31.03.2022	-	-	-	-	3,598.49	-	-	-	-	3,598.49
2	Expenditure from 01.04.2022 to 07.04.2022 (DOCO:08.04.2022)	-	-	-	-	0.17	-	-	-	-	0.17
3	Expenditure from 08.04.2022 to 31.03.2023	-	-	-	-	628.36	-	-	-	-	628.36
4	Expenditure from 01.04.2023 to 31.03.2024	-	-	-	-	26.54	-	-	-	-	26.54
5	Expenditure from 01.04.2024 to 31.12.2024	-	-	-	-	21.98	-	-	-	-	21.98
6	Estimated Expenditure from 01.01.2025 to 31.03.2025	-	-	-	-	64.39	-	-	-	-	64.39
	Total	-	-	-	-	4,339.93	-	-	-	-	4,339.93

S/N	Particulars	Sub-station	PLCC/ Communication System
1	Total Cost (Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of Civil works for the purpose of Initial Spares)	3,508.11	
2	Initial Spares included above	164.40	

We certify that we have verified the expenditure up to 31.12.2024 as referred above on the basis of the information extracted from the audited Financial Statements/ Information of Power Grid Corporation of India Ltd, Eastern Region-I as on 31.12.2024.

The estimated expenditure from 01.01.2025 to 31.03.2025 as stated at serial number "6" above is based on the Management estimate which has been relied upon by us.

Place: Kolkata
Date: 18.02.2025

JAIN PARAS BILALA & CO
Chartered Accountants
FRN No-011046C

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TOSHNIWAL

* Digitally signed by ASHIS TOSHNIWAL
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CA Ashis Toshniwal
Mem No-058521
UDIN - 25058521BMJVD01538



Asset-3

JAIN PARAS BILALA & CO

CHARTERED ACCOUNTANTS

MARSHALL HOUSE, 33/1, NETAJI SUBHAS ROAD, 5TH FLOOR, ROOM NO. 507, KOLKATA - 700001

Certificate Ref. No. ERSS XXIII-03

Dated : 18.02.2025

CERTIFICATE

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost of LILO of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400kV Line Bays at Saharsa-New (POWERGRID) sub-station under ERSS XXIII in EASTERN REGION TRANSMISSION SYSTEM -I Region of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 28.04.2022 is detailed as under:

					(Rs. in Lakhs)
S/N	Particulars	Capital Cost	IEDC	IDC	Total
1	Expenditure upto 31.03.2022	11,003.40	2,493.98	75.89	13,573.27
2	Expenditure from 01.04.2022 to 27.04.2022 (DOCO: 28.04.2022)	415.85	-	32.86	448.71
3	Expenditure from 28.04.2022 to 31.03.2023	769.71			769.71
4	Expenditure from 01.04.2023 to 31.03.2024	177.30			177.30
5	Expenditure from 01.04.2024 to 31.12.2024	180.27			180.27
6	Estimated Expenditure from 01.01.2025 to 31.03.2025	1,201.23			1,201.23
	Total	13,747.76	2,493.98	108.75	16,350.49

We certify that we have verified the expenditure up to 31.12.2024 as referred above on the basis of the information extracted from the audited Financial Statements/ Information of Power Grid Corporation of India Ltd, Eastern Region-I.
Estimated expenditure from 01.01.2025 to 31.03.2025 is based on Management estimate which has been relied upon by us.

Place:- Kolkata
Date:- 18.02.2025

JAIN PARAS BILALA & CO
Chartered Accountants
FRN No-011046C

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JAIN PARAS BILALA & CO

CHARTERED ACCOUNTANTS

MARSHALL HOUSE, 33/1, NETAJI SUBHAS ROAD, 5TH FLOOR, ROOM NO. 507, KOLKATA - 700001

Certificate Ref. No. ERSS XXIII-03

Dated : 18.02.2025

CERTIFICATE

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, KatwariaSara, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost of LLO of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400kV Line Bays at Saharsa-New (POWERGRID) sub-station under ERSS XXIII in EASTERN REGION TRANSMISSION SYSTEM -I Region of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 28.04.2022 is detailed as under:

(Rs. in Lakhs)											
S/N	Particulars	Freehold Land	Leasehold Land	Building and Civil Works	Tr. Line	Sub Station	OPGW	Communication System excl. OPGW	IT equipment incl. software, UNMS, URTDSM, EMS, Cyber Security System, SCADA	Batteries	Total
1	Expenditure upto 31.03.2022	-	-	-	11,481.10	1,899.41	-	156.74	36.02	-	13,573.27
2	Expenditure from 01.04.2022 to 27.04.2022 (DOCO:28.04.2022)	-	-	-	409.30	35.77	-	2.96	0.68	-	448.71
3	Expenditure from 28.04.2022 to 31.03.2023	-	-	-	527.20	242.51	-	-	-	-	769.71
4	Expenditure from 01.04.2023 to 31.03.2024	-	-	-	81.48	95.82	-	-	-	-	177.30
5	Expenditure from 01.04.2024 to 31.12.2024	-	-	-	38.96	39.62	-	81.40	20.29	-	180.27
6	Estimated Expenditure from 01.01.2025 to 31.03.2025	-	-	-	456.31	744.92	-	-	-	-	1,201.23
	Total	-	-	-	12,994.35	3,058.05	-	241.10	56.99	-	16,350.49

S/N	Particulars	Sub-station	PLCC/ Communication System	Tr. Line
1	Total Cost (Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of Civil works for the purpose of Initial Spares)	2,695.81	211.20	10,790.63
2	Initial Spares included above	40.86	7.10	105.03

We certify that we have verified the expenditure up to 31.12.2024 as referred above on the basis of the information extracted from the audited Financial Statements/ Information of Power Grid Corporation of India Ltd, Eastern Region-I.

Estimated expenditure from 01.01.2025 to 31.03.2025 is based on Management estimate which has been relied upon by us.

Place Kolkata
Date: 18.02.2025

JAIN PARAS BILALA & CO
Chartered Accountants
FRN No-011046C

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CA Ashis Toshniwal
Mem No-058521

UDIN - 25058521BM|VDP3466

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Liability Flow Statement
Name of Petitioner : POWERGRID Corporation of India Ltd.
Project Name : ERSX XXIII

ASSET-1

Asset No	Party	Particular's (TL/SS)	Year of Actual Capitalization	Outstanding Liability as on 02.01.2022/DO CO	Discharge						Reversal						Additional Liability Recognized*						Outstanding Liability as on 31.03.2024
					2019-20	2020-21	2021-22	2022-23	2023-24	Total (19-24)	2019-20	2020-21	2021-22	2022-23	2023-24	Total (19-24)	2019-20	2020-21	2021-22	2022-23	2023-24	Total (19-24)	
Upgradation of 400 kv Line Bay equipment : 2 nos. for termination of Kahalgach-Durgapur Line section formed after bypassing of the Line,DOCO : 02.01.2022	VIKRAN ENGINEERING AND EXIM PVT LTD	SS	02.01.2022 (FY 2021-22)	94.77			11.89	4.44	18.90	35.23													59.54
	M/s L& T and ETC	TL	02.01.2022	180.67			33.29	38.73	-	72.02													
	M/s Vikrant Engrs. ETC	SS/PLCC	02.01.2022	84.21			39.69	28.65	15.87	84.21													108.65
	Total			359.65			84.87	71.82	34.77	191.46													168.19

Asset No	Party	Particular's (TL/SS)	Year of Actual Capitalization	Outstanding Liability as on 31.03.2024	Discharge						Reversal						Additional Liability Recognized*						Outstanding Liability as on 31.03.2029
					2024-25	2025-26	2026-27	2027-28	2028-29	Total (24-29)	2024-25	2025-26	2026-27	2027-28	2028-29	Total (24-29)	2024-25	2025-26	2026-27	2027-28	2028-29	Total (24-29)	
Upgradation of 400 kv Line Bay equipment : 2 nos. for termination of Kahalgach-Durgapur Line section formed after bypassing of the Line,DOCO : 02.01.2022	VIKRAN ENGINEERING AND EXIM PVT LTD	SS	02.01.2022 (FY 2021-22)	59.54						59.54													0.00
	M/s L& T and ETC	TL	02.01.2022	108.65						108.65													
	Total			168.19						168.19													



Liability Flow Statement
Name of Petitioner : POWERGRID Corporation of India Ltd.
Project Name : ERSX XXIII

Annex-2

Asset No	Party	Particular's (TL/SS)	Year of Actual Capitalization	Outstanding Liability as on 08.04.2022/DOCO	Discharge							Additional Liability Reconciled*					Outstanding Liability as on 31.03.2024
					2019-20	2020-21	2021-22	2022-23	2023-24	Total (19-24)	2019-20	2020-21	2021-22	2022-23	2023-24	Total (19-24)	
01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV/ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station under ERSX XXIII, DOCO : 08.04.2022	VIKRAN ENGINEERING AND EXIM PVT LTD	SS	08.04.2022 (FY 2022-23)	741.27				628.36	26.54	654.90	-	-	-	-	-	-	86.37

Asset No	Party	Particular's (TL/SS)	Year of Actual Capitalization	Outstanding Liability as on 31.03.2024	Discharge							Additional Liability Reconciled*					Outstanding Liability as on 31.03.2029
					2024-25	2025-26	2026-27	2027-28	2028-29	Total (24-29)	2024-25	2025-26	2026-27	2027-28	2028-29	Total (24-29)	
01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV/ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station under ERSX XXIII, DOCO : 08.04.2022	VIKRAN ENGINEERING AND EXIM PVT LTD	SS	08.04.2022 (FY 2022-23)	86.37	86.37			-	-	86.37							-



Liability Flow Statement

Name of Petitioner : POWERGRID Corporation of India Ltd.

Project Name : ERSS XXIII

Annex-3

(Rs. in Lakhs)																			
Asset No	Party	Particular's (TL/SS)	Year of Actual Capitalization	Outstandi ng Liability as on 02.01.2022 /DOCO	Discharge						Addition to Gross block						Outstanding Liability as on 31.03.2024		
					2019-20	2020-21	2021-22	2022-23	2023-24	Total (19-24)	2019-20	2020-21	2021-22	2022-23	2023-24	Total (19-24)			
LILO of both Circuits of Kishanganj (POWERGRID) - Darbhanga (DMTCL) 400 KV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400KV Line Bays at Saharsa-New (POWERGRID) sub-station under ERSS XXIII, DOCO : 28.04.2022	VIKRAN ENGINEERING AND EXIM PVT LTD	SS	28.04.2022 (FY 2022-23)	918.87				38.51	95.82	134.33	-	-	-	204.00	-	204.00	784.54		
				81.40															
		LARSEN And TOUBRO LIMITED	TL		803.95				227.2	81.48	308.68				300.00		300.00	495.27	
Total				1,824.51	-	-	-	265.71	177.30	443.01	-	-	-	504.00	-	504.00	1,381.50		

Asset No	Party	Particular's (TL/SS)	Year of Actual Capitalization	Outstandi ng Liability as on	Discharge								Addition to Gross block						Outstanding Liability as on 31.03.2029				
					2024-25	2025-26	2026-27	2027-28	2028-29	Total (24-29)	2024-25	2025-26	2026-27	2027-28	2028-29	Total (24-29)							
LIL of both Circuits of Kishanganj (POWERGRID) - Darbhanga (DMTCL) 400 KV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400KV Line Bays at Saharsa-New (POWERGRID) sub-station under ERSS XXIII, DOCO : 28.04.2022	VIKRAN ENGINEERING AND EXIM PVT LTD	SS	28.04.2022 (FY 2022-23)	784.54						784.54											-		
				81.40						81.40												-	
		Communication System excl. OPGW																					-
		I. T Equipment incl. software, UNIMS, URTDSM, EIMS, Cyber Security System, REMC, WAMS, SCADA System		20.29						20.29													
		LARSEN And TOUBRO LIMITED	TL		495.27						495.27												-
				1,381.50	-	-	-	-	-	-	-	-	-	-	-	1,381.50	-	-	-	-	-	1,381.50	



The admissibility of additional capital expenditure (Add Cap) incurred after DOCO is to be dealt in accordance with the provisions of Regulation 24 of CERC Regulations 2019. The extract of Regulation 24 of the Regulations 2019 is reproduced as under:

"Additional Capitalization"

24. Additional Capitalization within the original scope and up to the cut-off date.

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

- Un discharged liabilities recognized to be payable at a future date;
- Works deferred for execution;
- Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;
- 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
- Change in law or compliance of any existing law; and
- 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.

- 7.4 The additional Capitalization incurred/projected to be incurred in the contextual assets is mainly on account of Balance/Retention Payments covered under 24(1)(a) & 24(1)(b) and hence the same may be allowed by Hon'ble Commission. The details of underlying reasons for additional capitalization Asset is given in respective form - 7.

The cut-off dates for the subject assets are as follows:

Asset	DOCO	Cut-Off Date
Asset 1	02.01.2022	31.01.2025
Asset 2	08.04.2022	30.04.2025
Asset 3	28.04.2022	30.04.2025

- 7.5 The cost worked out for the tariff claim is as follows:

Rs. In lakhs

Asset 1

Sl.No	Expenditure	Tr. Line	S/S	PLCC	IT Equip.	Total
1	As per Auditor Certificate (Upto DOCO) as on 02.01.2022	1201.55	462.38	52.87	0	1716.8
2	Less: Accrual IDC upto DOCO	0.03	0.01	0.00	0	0.04
3	Expenditure upto DOCO Excluding Accrual IDC	1201.52	462.37	52.87	0.00	1716.76



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Asset 1

Sl.No	Expenditure	Tr. Line	S/S	PLCC	IT Equip.	Total
4	Actual expenditure from DOCO to 31.03.2022	90	61.89	0	0	151.89
5	Add: Accrual IDC (Discharge during 2021-22)	0.03	0.01	0.00	0	0.04
6	Expenditure 2021-22 (Including Accrual IDC)	90.03	61.90	0.00	0.00	151.93
7	Estimated Add Cap during 2022-23 (As per auditor certificate)	195.9	121.98	1.47	0	319.35
8	Add: Accrual IDC (Discharge during 2022-23)	0	0	0	0	0
9	Est. Expenditure 2022-23 (Including Accrual IDC)	195.9	121.98	1.47	0	319.35
10	Estimated Add Cap during 2023-24 (As per auditor certificate)	100	80.9	0.6	0	181.5
11	Estimated Add Cap during 2024-25 (As per auditor certificate)	0	28.93	0	0	28.93
12	Total Estimated Completion Cost	1587.45	756.08	54.94	0.00	2398.47

Rs. In lakhs

Asset 2

Sl.No	Expenditure	Tr. Line	S/S	PLCC	IT Equip.	Total
1	As per Auditor Certificate (Upto DOCO) as on 08.04.2022	0	3598.66	0	0	3598.66
2	Less: Accrual IDC upto DOCO	0.00	0.33	0.00	0	0.33
3	Expenditure upto DOCO Excluding Accrual IDC	0.00	3598.33	0.00	0.00	3598.33
4	Actual expenditure from DOCO to 31.03.2023	0	626.38	0	0	626.38
5	Add: Accrual IDC (Discharge during 2022-23)	0.00	0.33	0.00	0	0.33
6	Expenditure 2022-23 (Including Accrual IDC)	0.00	626.71	0.00	0.00	626.71
7	Estimated Add Cap during 2023-24 (As per auditor certificate)	0	114.9	0	0	114.9



Rs. In lakhs

Asset 2

Sl.No	Expenditure	Tr. Line	S/S	PLCC	IT Equip.	Total
8	Add: Accrual IDC (Discharge during 2023-24)	0	0	0	0	0
9	Est. Expenditure 2023-24 (Including Accrual IDC)	0	114.9	0	0	114.9
10	Estimated Add Cap during 2024-25 (As per auditor certificate)	0	0	0	0	0
11	Estimated Add Cap during 2025-26 (As per auditor certificate)	0	0	0	0	0
12	Total Estimated Completion Cost	0.00	4339.94	0.00	0.00	4339.94

Rs. In lakhs

Asset 3

Sl.No	Expenditure	Tr. Line	S/S	PLCC	IT Equip.	Total
1	As per Auditor Certificate (Upto DOCO) as on 28.04.2022	11890.40	1935.18	159.70	36.70	14021.98
2	Less: Accrual IDC upto DOCO	34.99	5.69	0.47	0.11	41.26
3	Expenditure upto DOCO Excluding Accrual IDC	11855.41	1929.49	159.23	36.59	13980.72
4	Actual expenditure from DOCO to 31.03.2023	1103.95	320.00	0.00	0.00	1423.95
5	Add: Accrual IDC (Discharge during 2022-23)	34.99	5.69	0.47	0.11	41.26
6	Expenditure 2022-23 (Including Accrual IDC)	1138.94	325.69	0.47	0.11	1465.21
7	Estimated Add Cap during 2023-24 (As per auditor certificate)	0	593.95	81.4	20.29	695.64
8	Add: Accrual IDC (Discharge during 2023-24)	0	0	0	0	0
9	Est. Expenditure 2023-24 (Including Accrual IDC)	0	593.95	81.4	20.29	695.64
10	Estimated Add Cap during 2024-25 (As per auditor certificate)	0	208.92	0	0	208.92



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Rs. In lakhs

Asset 3

Sl.No	Expenditure	Tr. Line	S/S	PLCC	IT Equip.	Total
11	Estimated Add Cap during 2025-26 (As per auditor certificate)	0	0	0	0	0
12	Total Estimated Completion Cost	12994.35	3058.05	241.10	56.99	16350.49

8. TRANSMISSION TARIFF for 2019-24 BLOCK:

- 8.1. That as per regulation 8(1) (ii), 14 (5) and regulation 15 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, the tariff for transmission of electricity on Inter-State transmission system (ISTS) shall comprise transmission charges for recovery of annual fixed cost consisting of (a) Return on Equity, (b) Interest on Loan Capital, (c) Depreciation, (d) Interest on Working Capital and (e) Operation and maintenance expenses.
- 8.2. The tariff for block 2019-2024 has been worked out as per Regulation 10 of the CERC (Terms and Conditions of Tariff) Regulations, 2019. In the present petition the transmission tariff has been calculated taking actual / estimated Expenditure up to DOCO and estimated expenditure from anticipated DOCO to 31.03.2021. The tariff Formats for block 2019-24 has been worked out as per Annexure-I, Part III of the tariff regulations for period 2019-24 and the Calculations for working out the tariff along with supporting documentation are attached hereto as Encl-7.
- 8.3. The annual transmission tariff for the tariff period 2019-24 is summarized as below:

(₹ in lakhs)

Asset	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-1	-	-	67.51	309.05	340.54
Asset-2	-	-	-	837.11	905.86
Asset-3	-	-	-	2252.61	2558.57
AFC Asset	-	-	67.51	3398.77	3804.97

- 8.4. That, it is submitted that the petitioner being liable to pay income tax at MAT rate prescribed vide The taxation laws (Amendment) ordinance 2019 published in the Gazette dt. 20th September, 2019. The 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(2) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for 2019-24 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 ~~grossed up~~ based on actual tax paid



B M CHATRATH & CO LLP
(Formerly B M CHATRATH & CO)
CHARTERED ACCOUNTANTS
CENTRE POINT, 4TH FLOOR, SUITE NO 440
21, HEMANTA BASU SARANI, KOLKATA - 700001

ASSET - 1

CERTIFICATE

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost for Bypassing of 400 kv D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400 kv S/C Farakka-Durgapur (Ckt-1 & Ckt-2) existing Transmission Line from NTPC, Farakka so as to form 400 kv D/C Kahalgaon-Durgapur along with upgraded bays at Durgapur SS and Kahalgaon SS Under Eastern region Strengthening Scheme-XXIII in Eastern Region of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 02.01.2022 is detailed as under:

(₹ in Lakhs)					
S/N	Particulars	Capital Cost	IEDC	IDC	Total
1	Expenditure upto 31.03.21	673.91	46.02	1.17	721.10
2	Expenditure from 01.04.21 to 01.01.22 (DOCO)	605.52	361.88	28.30	995.70
3	Projected Expenditure from 02.01.22-31.03.22	151.89			151.89
4	Projected Expenditure from 01.04.22-31.03.23	319.35			319.35
5	Projected Expenditure from 01.04.23-31.03.24	181.50			181.50
6	Projected Expenditure from 01.04.24-31.03.25	28.93			28.93
	Total	1,961.10	407.90	29.47	2,398.47

We certify that we have verified the expenditure up to 31.03.2021 as referred above on the basis of the information drawn from the audited Statement of Accounts of Power Grid Corporation of India Ltd. (ER II) and expenditure from 01.04.21 to 01.01.22 as per the books of accounts of ER-II.

The estimated expenditure on Sr. No -3, 4, 5 & 6 is based on Management estimate.

Place:- Kolkata
Date:- 16.06.2022



for B M CHATRATH & CO LLP
Chartered Accountants
Firm Registration No.- 301011E/E300025
SANJAY SARKAR Digitally signed by
SANJAY SARKAR
Date: 2022.06.16
17:50:04 +05'30'
(CA SANJAY SARKAR)
Partner
Membership No.- 064305
UDIN-22064305ALBLXJ2192



B M CHATRATH & CO LLP
(Formerly B M CHATRATH & CO)
CHARTERED ACCOUNTANTS
CENTRE POINT, 4TH FLOOR, SUITE NO 440
21, HEMANTA BASU SARANI, KOLKATA - 700001

CERTIFICATE

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that **Capital Cost for Bypassing of 400 kv D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400 kv S/C Farakka-Durgapur (Ckt-1 & Ckt-2) existing Transmission Line from NTPC, Farakka so as to form 400 kv D/C Kahalgaon-Durgapur along with upgraded bays at Durgapur SS and Kahalgaon SS Under Eastern region Strengthening Scheme-XXIII** in Eastern Region of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 02.01.2022 is detailed as under:

(₹ in Lakhs)

S/N	Particulars	Land (Freehold)	Building and Civil Works	Tr. Line	Sub-Station	PLCC/ Communication System	I. T Equipment including software	Total
1	Expenditure upto 31.03.21	0.00	0.00	606.75	79.25	35.10	0.00	721.10
2	Expenditure from 01.04.21 to 01.01.22(DOCO)	0.00	0.00	594.80	383.13	17.77	0.00	995.70
3	Projected Expenditure from 02.01.22-31.03.22	0.00	0.00	90.00	61.89	0.00	0.00	151.89
4	Projected Expenditure from 01.04.22-31.03.23	0.00	0.00	195.90	121.98	1.47	0.00	319.35
5	Projected Expenditure from 01.04.23-31.03.24	0.00	0.00	100.00	80.90	0.60	0.00	181.50
6	Projected Expenditure from 01.04.24-31.03.25	0.00	0.00	0.00	28.93	0.00	0.00	28.93
	Total	0.00	0.00	1587.45	756.08	54.94	0.00	2398.47

S/N	Particulars	TL	Sub-station	PLCC
1	Total Cost (Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of Civil works for the purpose of Initial Spares)	1288.00	621.85	51.25
2	Initial Spares included above	12.36	21.66	7.75

We certify that we have verified the expenditure up to 31.03.2021 as referred above on the basis of the information drawn from the audited Statement of Accounts of Power Grid Corporation of India Ltd. (ER II) and expenditure from 01.04.21 to 01.01.22 as per the books of accounts of ER-II.

The estimated expenditure on Sr. No -3, 4, 5 & 6 is based on Management estimate.

Place:- Kolkata
Date:- 16.06.2022



for B M CHATRATH & CO LLP
Chartered Accountants
Firm Registration No.- 301011E/E300025
SANJAY SARKAR Digitally signed by
SANJAY SARKAR Date: 2022.06.16
17:51:58 +05'30'
(CA SANJAY SARKAR)
Partner
Membership No.- 064305
UDIN-22064305ALBLXJ2192

Sanjay



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Statement showing IDC Discharged upto DOCO

Project:	Eastern region Strengthening Scheme-XXIII									
Element:	Bypassing of 400 kv D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400 kv S/C Farakka-Durgapur (Ckt-1 & Ckt-2) existing Transmission Line from NTPC, Farakka so as to form 400 kv D/C Kahalgaon-Durgapur along with upgraded bays at Durgapur SS and Kahalgaon SS									
DOCO: Actual	02-Jan-22	Amount	Interest Rate	Drawl Date	Total IDC	Annual Interest Payment Data upto DOCO	Interest Discharged upto DOCO	Annual Interest Payment Data after DOCO		
Loans										
HDFC-02 (2021-2022) (Q1) (03.04.2021)		446.75	Floating	03-Apr-21	13.11	01-Oct-21	13.11			
HDFC-02 (2020-2021) (Q4) (04.03.2021)		256.28	Floating	04-Mar-21	12.70	01-Jan-22	12.66			
HDFC-02 (2021-2022) (Q1) (04.06.2021)		56.67	Floating	04-Jun-21	1.09	01-Jan-22	1.09			
HDFC-02 (2021-2022) (Q1) (07.08.2021)		43.33	Floating	07-Jun-21	0.81	01-Oct-21	0.81			01-Feb-22
HDFC-02 (2021-2022) (Q2) (03.09.2021)		398.73	Floating	03-Sep-21	1.75	01-Oct-21	1.75			
Total		1201.76			29.47		29.42			
Total IDC as per Cost Certificate		29.47								
IDC Discharged upto DOCO		29.42								
Accrual IDC upto DOCO (Discharged during 2021-2022)		0.04								
Accrual IDC upto DOCO (Discharged during 2022-2023)		0.00								

Certified that Interest on HDFC Loan is paid monthly and Interest on Bonds is paid annually as per terms of Agreement/terms of issue of bonds and no default has been made in respect of debt servicing



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ASSET - 1



Statement showing IDC Discharged upto DOCO

Project:	Eastern region Strengthening Scheme-XXIII									
Element:	01 no. 500 MVA, 400/220 KV Transformer (4th ICT) alongwith 01 no. 400 KV ICT bay (AIS) & 01 No. 220 KV ICT bay (GIS) alongwith 220 KV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 KV sub-station									
DOCO: Actual	08-Apr-22	Amount	Interest Rate	Drawl Date	Total IDC	Annual Interest Payment Date upto DOCO	Interest Discharged upto DOCO	Annual Interest Payment Date after DOCO		
Loans										
Bond LXIX		144.64	6.05%	25-Mar-22	0.34	25-Mar-22	0.01	25-Mar-23		
HDFC-02 (2021-2022) (Q1) (03.04.2021)		1898.12	Floating	03-Apr-21	55.40	01-Oct-21	55.40			
HDFC-02 (2021-2022) (Q1) (02.06.2021)		488.43	Floating	02-Jun-21	9.16	01-Oct-21	9.16			
HDFC-02 (2021-2022) (Q2) (03.09.2021)		17.88	Floating	03-Sep-21	0.08	01-Oct-21	0.08			
Total		2519.07			64.98		64.65			
Total IDC as per Cost Certificate		64.98								
IDC Discharged upto DOCO		64.65								
Accrual IDC upto DOCO (Discharged during 2022-2023)		0.33								
Accrual IDC upto DOCO (Discharged during 2023-2024)		0.00								

Certified that interest on HDFC Loan is paid monthly and interest on Bonds is paid annually as per terms of Agreement/terms of issue of bonds and no default has been made in respect of debt servicing



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ASSET - D



ASSET-3

Statement showing IDC Discharged upto DOCO

Project:	Eastern region Strengthening Scheme-XXIII									
Element:	LILO of both Circuits of Kishanganj (POWERGRID) -Dardhang (DMTCL) 400 KV DIC (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400KV Line Bays at Saharsa-New (POWERGRID) sub-station									
DOCO: Actual	28-Apr-22	Amount	Interest Rate	Drawl Date	Total IDC	Annual Interest Payment Date upto DOCO	Interest Discharged upto DOCO	Annual Interest Payment Date after DOCO		
Loans										
Bond LXIX		7340.56	6.05%	25-Mar-22	41.37	25-Mar-22	0.11	25-Mar-23		
HDFC-02 (2021-2022) (Q1) (03.04.2021)		1967.96	Floating	03-Apr-21	57.74	01-Oct-21	57.74			
HDFC-02 (2021-2022) (Q1) (02.06.2021)		488.24	Floating	02-Jun-21	9.65	01-Oct-21	9.55			
HDFC-02 (2021-2022) (Q2) (03.09.2021)		18.63	Floating	03-Sep-21	0.08	01-Oct-21	0.08			
Total		18.63			108.75		67.49			
Total IDC as per Coel Certificate		108.75								
IDC Discharged upto DOCO		87.49								
Accrual IDC upto DOCO (Discharged during 2022-2023)		41.28								
Accrual IDC upto DOCO (Discharged during 2023-2024)		0.00								

Certified that Interest on HDFC Loan is paid monthly and Interest on Bonds is paid annually as per terms of Agreement terms of issue of bonds and no default has been made in respect of debt servicing.



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2/19/22, 4.13 PM

FW: Approval for energization of 400 kV Kahalgaon - Sudeep Nandi (सुदीप नंदी)

FW: Approval for energization of 400 kV Kahalgaon-Durgapur Ckt-I formed after bypassing of 400 kV D/C Farakka Kahalgaon Ckt-4 and 400 S/C Farakka Durgapur Ckt-I

M Pandey (एम. पांडेय)

Thu 12/30/2021 10:12 AM

To: Pinaki Dutta (पिनाकी दत्ता) <pdutta@powergrid.in>; Prosun Kumar Mallik (प्रोसुन कुमार मलिक) <prosun.mallik@powergrid.in>;
Cc: S Chattopadhyay (एस. चट्टोपाध्याय) <schattpadhyay@powergrid.in>; Dharmendra Kumar Javeri (डी.के. जावेरी) <javeri@powergrid.in>; S Sen (एस. सेन) <subhendra@powergrid.in>; B K Pradhan (बी.के. प्रधान) <bkpradhan@powergrid.in>;
Madhusudan Dutt (एम. दत्त) <msdutt@powergrid.in>; M K Kirtania (एम.के. किरटानिया) <malaykk@powergrid.in>; Partha Ghosh (पार्थ घोष) <partha.ghosh@powergrid.in>; Sukdev Bal (सुकदेव बल) <sukdevbal@powergrid.in>; Sudeep Nandi (सुदीप नंदी) <sudeepnandi@powergrid.in>;

Sir
This is to inform that approval for energization of 400 kV Kahalgaon-Durgapur Ckt-I formed after bypassing of 400 kV D/C Farakka Kahalgaon Ckt-4 and 400 S/C Farakka Durgapur Ckt-I are obtained from CEA thru mail. The same shall be issued in letter head form shortly subject to availability of Concern Inspector in their office. Hence it is requested to pursue further for early charging of the line.

With Best Regards

M. Pandey

From: Dinesh Kumar Bauri [dkbauri.cea@gov.in]

Sent: Wednesday, December 29, 2021 8:38 PM

To: fkk ER II; M Pandey (एम. पांडेय)

Cc: Subhash Ruben Tudu

Subject: Approval for energization of 400 kV Kahalgaon-Durgapur Ckt-I formed after bypassing of 400 kV D/C Farakka Kahalgaon Ckt-4 and 400 S/C Farakka Durgapur Ckt-I

- Ref: 1) Application No. B/2021/00942 dated 26/11/2021
2) Our Inspection Report dated 07/12/2021
3) Your compliance dated 10/12/2021
4) Your e-mail dated 28/12/2021

Whereas the inspection for the Bypassing of Farakka-Kahalgaon Ckt- 3 & 4 and Farakka-Durgapur Ckt-I & 2 from NTPC, FSTPS so as to form 400 kV Kahalgaon-Durgapur Double Ckt line was carried by Shri S.R.Tudu, Asst. Director-I on 06.12.2021, and whereas your compliance of our observations raised vide under reference no-(2) has been informed vide your compliance report under reference no-(3) & (4).

In continuous to our approval dated 13/12/2021, approval is hereby granted to energize 400 kV Kahalgaon-Durgapur Ckt-I formed by Bypassing of Farakka Kahalgaon Ckt-4 and Farakka Durgapur Ckt-I from NTPC, FSTPS. The approval is subject to consistent compliance of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulation 2010 as amended till date

This approval is valid for one month or till the issuance in official letterhead whichever is earlier.

Dinesh Kr. Bauri
Director,
Regional Inspectorial Organisation (E),
Ministry of Power, GOI

<https://webmail.powergrid.in/owa/#viewmodel=ReadMessageItem&ItemID=AAMkADQyYjM1MGUwLWZiYTEiNDI0MmNS1hNjE0LTQxMTViOTVjZTY1>





पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

Certificate as per CERC Tariff Regulations 2019

And

**CERC (Indian Electricity Grid Code) (Fourth Amendment) Regulations 2016
(For Inter State Transmission System)**

It is to certify that the asset "Bypassing of 400 kV D/C Farakka – Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka – Durgapur (Ckt-1 & Ckt-2) existing Transmission Line from NTPC, Farakka so as to form 400 kV D/C Kahalgaon – Durgapur along with upgraded bays at Durgapur and Kahalgaon SS" under project ERSS-XXIII along-with associated bays and communication system, conform to the relevant Grid Standard and Grid Code, and were capable of operation to their full capacity as per requirements of declaration of Commercial Operation w.e.f. 16:00 hrs. of 01.01.2022:

(Signature)

(K. Sreekant)
Chairman and Managing Director
Power Grid Corporation of India Ltd.



केन्द्रीय कार्यालय : "सौदामिनी" प्लॉट नं. 2, सेक्टर-29, गुरुग्राम-122001, (हरियाणा), दूरभाष : 0124-2671700-719
Corporate Office : "Saudamini", Plot No. 2, Sector-29, Gurugram-122001, (Haryana) Tel. : 0124-2671700-719

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

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Certificate as per CERC Tariff Regulations 2019
And
**CERC (Indian Electricity Grid Code) (Fourth Amendment) Regulations 2016
 (For Inter State Transmission System)**

It is to certify that following assets under ERSS-XXIII along-with associated Communication system, conform to the relevant Grid Standard and Grid Code, and are capable of operation to their full capacity as per requirement for declaration of Commercial operation.

S.N.	Name of the Assets	w.e.f.	
		Time	Date
1	500 MVA, 400/220 KV ICT-4 along with associated 400 kV side AIS bay & 220 kV side GIS bay at Muzaffarpur S/s and 220 kV Cable from ICT to GIS bay	19:26 Hrs.	07.04.2022



(K. Sreekant)
 Chairman & Managing Director
 Power Grid Corporation of India Limited

Certificate as per CERC Tariff Regulations 2019
And
CERC (Indian Electricity Grid Code) (Fourth Amendment) Regulations 2016
(For Inter State Transmission System)

It is to certify that following assets under ERSS-XXIII along-with associated Communication system, conform to the relevant Grid Standard and Grid Code, and are capable of operation to their full capacity as per requirement for declaration of Commercial operation.

S.N.	Name of the Assets	w.e.f.	
		Time	Date
1	LILO of both circuits of Kishanganj (POWERGRID) - Darbhanga (DMTCL) 400kV D/c (Quad) line at Saharsa-New (POWERGRID)	17:56 Hrs.	27.04.2022
2	400 KV Line Bays: 4 nos. (For termination of LILO of both circuits of Kishanganj (POWERGRID) - Darbhanga (DMTCL) 400 kV D/c line at Saharsa-New (POWERGRID)	17:56 Hrs.	27.04.2022



(K. Sreekant)
 Chairman & Managing Director
 Power Grid Corporation of India Limited

Cost as per LOA

Activity Description	Description	Unit	Qty	Supply					F&I		Erection						Total In Lakh	
				Unit Price	Total Price	PV	Total Price Incl PV	GST of supply	Total Supply Price	Unit F&I	Total F&I	Unit Ere/Civil	Total / Ere /Civil	PV Erection	Total Ere Incl of PV	GST		Total Ere
1	220 Kv EHV Cable	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19	20
	220 Kv OUTDOOR TERMINATION KIT SUITABLE FOR 220 KV XLPE CABLE	SET	6.00	635098.09	3810588.54	266741	4,077,329.7	733,919.35	4,811,249.09	7198	43,188		0	0	0	0	0	48.54
	220 Kv EHV Cable	EA	6.00		0.00	0	-	0.00	0.00		-	47500	285000	19950	304950	54891	359841	3.60
	220Kv GRADE 1CX1200 SQ. MM (XLPE) POWER CABLE	KM	2.5	15267781.78	38169454.45	2671862	40,841,316.3	7,351,436.93	48,192,753.19	173037	432,593	950000	2375000	166250	2541250	457425	2998675	516.24
	220 Kv EHV Cable																	
	220Kv XLPE POWER CABLE: MISCELLANEOUS INSTALLATION MATERIALS FOR CABLELAYING, JOINTING AND BONDING INCLUDING LINK BOXES ,SHEATH VOLTAGELIMITERS, EARTH CONTINUITY CABLE, EARTHING MATERIAL , GROUND MAT,CABLE MAKERS, WARNING TAPES AND ALL OTHER MATERIALS ETC REQUIRED AS PER TECHNICAL SPECIFICATIONS AND AS PER STATUTORY REQUIREMENTS	LS	1.00	465060.77	465060.77	32554	497,615.0	89,570.70	587,185.73	5271	5,271	47500	47500	3925	50825	9148.5	59973.5	6.52
	220 Kv EHV Cable	LS	1.00	497614.78	497614.78	34833	532,447.8	95,840.61	628,288.42	5640	5,640		0	0	0	0	0	6.34
	220 Kv EHV Cable- (ONE NO. OF EACH TYPE)	SET	1.00	497614.78	497614.78	34833	532,447.8	95,840.61	628,288.42	5640	5,640	237500	237500	16625	254125	45742.5	299867.5	9.34
	220 Kv EHV Cable- SINGLE PHASE EARTH LINK BOX FOR 220KV XLPE CABLE	EA	1.00	44180.43	44180.43	3093	47,273.1	8,509.15	55,782.21	501	501		0	0	0	0	0	0.56
	220 Kv EHV Cable- SHEATH VOLTAGE LIMITER	EA	1.00	261596.91	261596.91	18312	279,908.7	50,383.56	330,292.26	2965	2,965		0	0	0	0	0	3.33
	220 Kv EHV Cable- MANDATORY SPARE FOR CABLE TERMINATION KIT(EACH TYPE)	SET	1.00	635098.09	635098.09	44457	679,555.0	122,319.89	801,874.85	7198	7,198		0	0	0	0	0	8.09
	Total Cost of 220 Kv Cable including accessories																	602.57

Cost as per FR

Activity Description	Description	Unit	Qty	Unit Rate	Total Price	GST supply	F&I @ 4%	Total (in Lakh)
220 kv EHV cable	CABLE TERMINATION KIT 220KV AIS CABLE	6	SET	797,138.14	4782828.84	860909	191313	58.35
220 kv EHV cable	TERMINATION STRUCTURE FOR 220KV CABLES	6	SET	113,678.81	682072.8814	122773	27283	8.32
220 kv EHV cable	220KV 1CX1200SQ/MM XLPE POWER CABLE(KM)	2.5	KM	8,397,341.39	20993353.48	3778804	839734	256.12
220 kv EHV cable	INSTALL. ACCESSORY-1200SQMM 220KV CABLE	1	LS	346,191.89	346191.8886	62315	13848	4.22
220 kv EHV cable	CABLE STRAIGHT THROUGHJOINT-1200SQMM(LS)	1	LS	2,055,492.95	2055492.95	369989	82220	25.08
	Total Cost of 220 kv Cable including accessories							352.09

Variation over and above FR	250.48
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भारत सरकार
GOVERNMENT OF INDIA
विद्युत मंत्रालय, केन्द्रीय विद्युत प्राधिकरण
MINISTRY OF POWER, CENTRAL ELECTRICITY AUTHORITY
क्षेत्रीय निरीक्षण संगठन
REGIONAL INSPECTORIAL ORGANISATION

No. RIO/ER/PGCIL/Saharsa LILO/2022/ 4-5

Dated: 20/04/2022

Shri Pankaj Kumar Singh,
Power Grid Corporation of India Ltd
400/220/132 KV Saharsa Sub-station, Sihoul,
P.S - Bihra, Saharsa,
Bihar-852124

Subject: Approval for energization of LILO IN section of 400kv D/C Kishanganj-Darbhanga LILO at 400 KV Saharsa Substation under regulation 43 of CEA (Measures Relating to Safety and Electric Supply), Regulations, 2010.

Ref: 1) Your Application No. B/2022/01036 dated 17/03/2022
2) Inspection Report vide no. RIO/ER/PGCIL/Saharsa LILO/2022/11 dated 06/04/2022
3) Your compliance as uploaded in portal vide dated 11/04/2022, 12/04/2022 & 18/04/2022.

Whereas the inspection of LILO of 400kv D/C Kishanganj-Darbhanga Line at 400 KV Saharsa Substation was carried by the undersigned along with Shri Mohit Bansal, DD on 05/04/2022, and whereas your compliance ~~was not found~~ of our observations raised under reference no-(2) has been informed vide your compliance report under reference no (3).

Approval is hereby granted to energize the LOOPIN Double Circuit Line of 400 KV D/C Kishanganj-Darbhanga line at 400 KV Saharsa Substation.

This approval is strictly subject to your consistent full compliance with the relevant provisions of CEA (Measures Relating to Safety and Electric Supply), Regulations, 2010 in every respect.

The above installation shall be due for periodical inspection under Regulation 30 within two (2) years from the date of issue of this approval.



(Signature)
20/04/2022
(D. K. Bauri)

Director & Electrical Inspector
to Government of India

Copy to: Chief Engineer (CEI), CEA, 3rd Floor, NRPC, 18A, SJS Marg, Katwaria Sarai, New Delhi - 110016

14, गोल्फ क्लब रोड, टॉलीगंज, कोलकाता-700 033. 14, Golf Club Road, Tollygunge, Kolkata-700 033

Tele : 033-2423 5108 / 5107. Web : www.cea.nic.in



भारत सरकार
GOVERNMENT OF INDIA
विद्युत मंत्रालय, केन्द्रीय विद्युत प्राधिकरण
MINISTRY OF POWER, CENTRAL ELECTRICITY AUTHORITY
क्षेत्रीय निरीक्षण संगठन
REGIONAL INSPECTORIAL ORGANISATION

No. RIO/ER/PGCIL/Saharsa LILO/2022/ 29

Dated: 12/04/2022

Shri Pankaj Kumar Singh,
 Power Grid Corporation of India Ltd
 400/220/132 KV Saharsa Sub-station, Sihoul,
 P.S.- Bihra, Saharsa,
 Bihar-852124

Subject: Approval for energization of LILO OUT section of 400kV D/C Kishanganj-Darbhanga LILO at 400 KV Saharsa Substation under regulation 43 of CEA (Measures Relating to Safety and Electric Supply), Regulations, 2010.

Ref: 1) Your Application No- B/2022/01036 dated 17/03/2022
 2) Inspection Report vide no. RIO/ER/PGCIL/Saharsa LILO/2022/11 dated 06/04/2022
 3) Your compliance as uploaded in portal vide dated 11/04/2022 & 12/04/2022.

Whereas the inspection of LILO of 400kV D/C Kishanganj-Darbhanga Line at 400 kV Saharsa Substation was carried by the undersigned along with Shri Mohit Bansal, DD on 05/04/2022, and whereas your compliance (LILO OUT Part) of our observations raised under reference no-(2) has been informed vide your compliance report under reference no-(3).

Approval is hereby granted to energize the LOOPOUT Double Circuit Line of 400 kV D/C Kishanganj-Darbhanga line at 400 kV Saharsa Substation.

This approval is strictly subject to your consistent full compliance with the relevant provisions of CEA (Measures Relating to Safety and Electric Supply), Regulations, 2010 in every respect.

The above installation shall be due for periodical inspection under Regulation 30 within two (2) years from the date of issue of this approval.



(Signature)
 12/04/2022
 (D. K. Bauri)

Director & Electrical Inspector
 to Government of India

Copy to: Chief Engineer (CEI), CEA, 3rd Floor, NRPC, 18A, SJS Marg, Katwaria Sarai, New Delhi – 110016

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14, गोल्फ क्लब रोड, टॉलीगंज, कोलकाता-700 033, 14, Golf Club Road, Tollygunge, Kolkata-700 033

Tele : 033-2423 5108 / 5107, Web : www.cea.nic.in





भारत सरकार
GOVERNMENT OF INDIA
विद्युत मंत्रालय, केन्द्रीय विद्युत प्राधिकरण
MINISTRY OF POWER, CENTRAL ELECTRICITY AUTHORITY
क्षेत्रीय निरीक्षण संगठन
REGIONAL INSPECTORIAL ORGANISATION

No. RIO/ER/PGCIL/Saharsa/2022/22

Dated: 11/04/2022

Shri Pankaj Kumar Singh,
 400/220/132 KV Saharsa Sub-station, Sihoul,
 P.S.- Bihra, Saharsa,
 Bihar-852124

Subject: Approval for energization of electrical installations of 400 KV Extension Bays of PGCIL at 400 KV Saharsa Substation under regulation 43 of CEA (Measures Relating to Safety and Electric Supply), Regulations, 2010.

- Ref: 1) Your Application No- A/2022/09455 dated 09/03/2022
 2) Inspection Report vide no. RIO/ER/PGCIL/Saharsa/2022/12 dated 06/04/2022
 3) Your compliance as uploaded in portal vide dated 08/04/2022 & 11/04/2022.

Whereas the inspection of electrical installations of 400 KV Extension bays of PGCIL Saharsa Substation (Bay no 419, 420, 421, 422, 423 & 424) was carried by the undersigned along with Shri Mohit Bansal, DD on 04/04/2022, and whereas your compliance of our observations raised under reference no-(2) has been informed vide your compliance report under reference no-(3).

Approval is hereby granted to energize the electrical installations of 400 KV Extension bays (as per list at Annexure-I) of Powergrid at 400 KV Saharsa Substation.

This approval is strictly subject to:

- 1) Your consistent full compliance with the relevant provisions of CEA (Measures Relating to Safety and Electric Supply), Regulations, 2010 in every respect.
- 2) Full compliance of point no. 1 & 2 under regulation 12 of the inspection report issued under ref no (2).

The above installation shall be due for periodical inspection under Regulation 30 within two (2) years from the date of issue of this approval.



(Signature)
 11/04/2022
 (D. K. Bauri)

Director & Electrical Inspector
 to Government of India

Copy to: Chief Engineer (CEI), CEA, 3rd Floor, NRPC, 18A, SJS Marg, Katwaria Sarai, New Delhi – 110016

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14, गोल्फ क्लब रोड, टॉलीगंज, कोलकाता-700 033, 14, Golf Club Road, Tollygunge, Kolkata-700 033

Tele : 033-2423 5108 / 5107, Web : www.cea.nic.in



Equipment list												
Sl.No	Equipment Description	Equipment Make	Bay - 419			Bay - 420			Bay - 421			Rating
			R Phase	Y Phase	B Phase	R Phase	Y Phase	B Phase	R Phase	Y Phase	B Phase	
1	LA	LAMCO	227	228	229	X	X	X	233	234	235	336
2	CVT	CG	SH740652	SH740653	SH740654	X	X	X	SH740658	SH740659	SH740660	420kv
3	CT	CG	740633	740634	740635	740639	740640	740641	740645	740646	740647	3000
4	CB	SIEMENS	30921	30921	30921	30922	30922	30922	30923	30923	30923	3150A
5	WT	GET & D INDIA	37993011405	3.799E+10	X	X	X	X	37993011407	37993011408	X	3150A
6	ISO (89L)	SWITCHGEARS & STRUCTURALS	1591-112-03	1591-112-03	1591-112-03	X	X	X	1591-112-08	1591-112-08	1591-112-08	
7	ISO (89LE)		1591-112-03	1591-112-03	1591-112-03	X	X	X	1591-112-08	1591-112-08	1591-112-08	
8	ISO (89A)		1591-112-04	1591-112-04	1591-112-04	1591-112-06	1591-112-06	1591-112-06	1591-112-09	1591-112-09	1591-112-09	
9	ISO (89AE)		1591-112-04	1591-112-04	1591-112-04	1591-112-06	1591-112-06	1591-112-06	1591-112-09	1591-112-09	1591-112-09	
10	ISO (89B)		1591-112-05	1591-112-05	1591-112-05	1591-112-07	1591-112-07	1591-112-07	1591-112-10	1591-112-10	1591-112-10	
11	ISO (89BE)		1591-112-05	1591-112-05	1591-112-05	1591-112-07	1591-112-07	1591-112-07	1591-112-10	1591-112-10	1591-112-10	3150A



2022/11/19
[Signature]

Equipment list													
Sl.No	Equipment Description	Equipment Make	Bay - 422				Bay - 423				Bay - 424		
			R Phase	Y Phase	B Phase	R Phase	Y Phase	B Phase	R Phase	Y Phase	R Phase	B Phase	Rating
1	LA	LAMCO	224	225	226	X	X	X	230	231		232	336
2	CVT	CG	SH740649	SH740650	SH740651	X	X	X	SH740655	SH740656		SH740657	420kv
3	CT	CG	740630	740631	740632	740636	740637	740638	740642	740643		740644	3000
4	CB	SIEMENS	30924	30924	30924	30925	30925	30925	30926	30926		30926	3150A
5	WT	GE T&D INDIA	37993011409	37993011410	X	X	X	X	37993011411	37993011412	X		3150A
6	ISO (89L)		1591-112-11	1591-112-11	1591-112-11	X	X	X	1591-112-18	1591-112-18		1591-112-18	
7	ISO (89LE)		1591-112-11	1591-112-11	1591-112-11	X	X	X	1591-112-18	1591-112-18		1591-112-18	
	ISO (89A)	SWITCHGEARS & STRUCTURALS	1591-112-12	1591-112-12	1591-112-12	1591-112-14	1591-112-14	1591-112-14	1591-112-16	1591-112-16		1591-112-16	
9	ISO (89AE)		1591-112-12	1591-112-12	1591-112-12	1591-112-14	1591-112-14	1591-112-14	1591-112-16	1591-112-16		1591-112-16	
10	ISO (89B)		1591-112-13	1591-112-13	1591-112-13	1591-112-15	1591-112-15	1591-112-15	1591-112-17	1591-112-17		1591-112-17	
11	ISO (89BE)		1591-112-13	1591-112-13	1591-112-13	1591-112-15	1591-112-15	1591-112-15	1591-112-17	1591-112-17		1591-112-17	3150A



12/11/2022





पावर सिस्टम ऑपरेशन कॉरपोरेशन लिमिटेड (भारत सरकार का उद्यम)

POWER SYSTEM OPERATION CORPORATION LIMITED

(A Govt. of India Enterprise)

CIN : U40105DL2009GOI188682



पूर्वी क्षेत्रीय भार प्रेषण केन्द्र, 14, गोल्फ क्लब रोड, टॉलीगंज, कोलकाता - 700 033
EASTERN REGIONAL LOAD DESPATCH CENTRE, 14, Golf Club Road, Tollygunge, Kolkata - 700 033
Tel / दूरभाष : 033 2423 5867 / 5875 फेक्स : 033 2423 5809 / 5704 / 5029, E-mail / ई-मेल : erldc@posoco.in

प्रमाण पत्र संख्या/ Certificate Number: ERLDC/Trial Operation/2022/May/265

दिनांक/Date: 13/05/2022

ट्रांसमिशन एलिमेंट के परीक्षण संचालन के पूरा होने का प्रमाण पत्र Certificate of completion of Trial Operation of Transmission Element

संदर्भ/Reference:

- Communication dated 12-03-2022 from Transmission Licensee to RLDC In Format-I.
- Communication from RLDC dated 15-03-2022 to Transmission Licensee in Format-II.
- Communication from Transmission Licensee to RLDC dated 24-03-2022 in Format III, IIIA, IIIB, IIIC and IIID.
- Provisional approval dated 17-04-2022 from RLDC to Transmission Licensee for charging through mail Format-IV.
- Real time code issued by RLDC on 23-04-2022.
- Communication dated 02-05-2022 from Transmission Licensee In Format-V after trial operation.

उपरोक्त संदर्भ के आधार पर, यह इस बात से प्रमाणित है कि निम्नलिखित ट्रांसमिशन एलिमेंट ने परीक्षण ऑपरेशन को सफलतापूर्वक पूरा कर लिया है।
Based on the above reference, it is hereby certified that the following Transmission element has successfully completed the trial operation:

ट्रांसमिशन एसेट का नाम Name of the Transmission Asset:	400 kV Saharsa Kishanganj Ckt 3 along with associated bay (Main Bay No: 419, Tie Bay No: 420) at Saharsa SS. Only LILO Length 18.204 km owned by PGCIL*
ट्रांसमिशन एसेट का मालिक / Owner of the Transmission Asset :	Power Grid Corporation of India Limited (PGCIL)
सफल परीक्षण चलाने के संचालन के प्रारंभ होने की तारीख और समय/ Date and Time of Energization for commencement of successful trial run operation	17:48 hrs of 26.04.2022
सफल परीक्षण रन ऑपरेशन के पूरा होने की तारीख और समय/ Date and Time of completion of successful trial run operation	17:48 hrs of 27.04.2022

यह प्रमाण पत्र संचरण एलिमेंट के परीक्षण संचालन के सफल समापन को प्रमाणित करने के लिए सीईआरसी (भारतीय विद्युत ग्रिड कोड) विनियम, 2010 के विनियमन 6.3 (ए) (5) के अनुसार जारी किया जा रहा है। किसी अन्य उद्देश्य के लिए इस प्रमाण पत्र का उपयोग निषिद्ध है।

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

*LILO of 400 kV Darbhanga-Kishanganj D/C at Saharsa.



स्थान/Place: कोलकाता/Kolkata
प्रतिलिपि/Copy to:

- ED, PGCIL ERTS
- Member Secretary, ERPC, 14, Golf Club Road, Tollygunge, Kolkata-700033
- Executive Director, NLDC, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016
- Chief Engineer, SLDC-Bihar/DVC/Jharkhand/Odisha/Sikkim/West Bengal

हस्ताक्षर/Signature

[Signature]
13/5/2022
Name and Designation of the
issuing officer with official seal

रवि सुबर्/ Ravi Subbar
कार्यवाह निदेशक / Executive Director
पू.वे.भा.प्रे. के./E.R.L.D.C.
पोसोको / POSOCO.
कोलकाता - 33/Kolkata - 33

पंजीकृत एवं केन्द्रीय कार्यालय : प्रथम तल, बी 9, कुतुब इंस्टिट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली 110016

Registered & Corporate Office : 1st Floor, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110016

Website - www.posoco.in, E-mail : posococo@posoco.in



पावर सिस्टम ऑपरेशन कॉर्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

POWER SYSTEM OPERATION CORPORATION LIMITED

(A Govt. of India Enterprise)

CIN : U40105DL2009GOI188682

पूर्वी क्षेत्रीय भार प्रेषण केन्द्र, 14, गोल्फ क्लब रोड, टालिगंज, कोलकाता - 700 033

EASTERN REGIONAL LOAD DESPATCH CENTRE, 14, Golf Club Road, Tollygunge, Kolkata - 700 033

Tel / दूरभाष : 033 2423 5867 / 5875 फेक्स : 033 2423 5809 / 5704 / 5029, E-mail / ई-मेल : erlhc@posoco.in

प्रमाण पत्र संख्या/ Certificate Number: ERLDC/Trial Operation/2022/May/266

दिनांक/Date: 13/05/2022

ट्रांसमिशन एलिमेंट के परीक्षण संचालन के पूरा होने का प्रमाण पत्र
Certificate of completion of Trial Operation of Transmission Element

संदर्भ/Reference:

- i) Communication dated 12-03-2022 from Transmission Licensee to RLDC in Format-I.
- ii) Communication from RLDC dated 15-03-2022 to Transmission Licensee in Format-II.
- iii) Communication from Transmission Licensee to RLDC dated 24-03-2022 in Format III, IIIA, IIIB, IIIC and IIID.
- iv) Provisional approval dated 17-04-2022 from RLDC to Transmission Licensee for charging through mail Format-IV.
- v) Real time code issued by RLDC on 23-04-2022.
- vi) Communication dated 02-05-2022 from Transmission Licensee in Format-V after trial operation.

उपरोक्त संदर्भ के आधार पर, यह इस बात से प्रमाणित है कि निम्नलिखित ट्रांसमिशन एलिमेंट ने परीक्षण ऑपरेशन को सफलतापूर्वक पूरा कर लिया है।
Based on the above reference, it is hereby certified that the following Transmission element has successfully completed the trial operation:

ट्रांसमिशन एसेट का नाम Name of the Transmission Asset:	400 kV Saharsa Kishanganj Ckt 4 along with associated bay (Main Bay No: 422, Tie Bay No: 423) at Saharsa SS. Only LILO Length 18.204 km owned by PGCIL*
ट्रांसमिशन एसेट का मालिक / Owner of the Transmission Asset :	Power Grid Corporation of India Limited (PGCIL)
सफल परीक्षण चलाने के संचालन के प्रारंभ होने की तारीख और समय/ Date and Time of Energization for commencement of successful trial run operation	17:56 hrs of 26.04.2022
सफल परीक्षण रन ऑपरेशन के पूरा होने की तारीख और समय/ Date and Time of completion of successful trial run operation	17:56 hrs of 27.04.2022

यह प्रमाण पत्र संवर्ण एलिमेंट के परीक्षण संचालन के सफल समापन को प्रमाणित करने के लिए सीईआरसी (भारतीय विद्युत ग्रिड कोड) विनियम, 2010 के विनियमन 6.3 (ए) (5) के अनुसार जारी किया जा रहा है। किसी अन्य उद्देश्य के लिए इस प्रमाण पत्र का उपयोग निषिद्ध है।

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

*LILO of 400 kV Darbhanga-Kishanganj D/C at Saharsa.



स्थान/Place: कोलकाता/Kolkata
प्रतिलिपि/Copy to:

1. ED, PGCIL ERTS I
2. Member Secretary, ERPC, 14, Golf Club Road, Tollygunge, Kolkata-700033
3. Executive Director, NLDC, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016
4. Chief Engineer, SLDC-Bihar/DVC/Jharkhand/Odisha/Sikkim/West Bengal

हस्ताक्षर/Signature

Name and Designation of the
Issuing officer with official seal

राजीव सुत्रधर / Rajib Sutradhar
कार्यकारी निदेशक / Executive Director
पू.वे.भा.प्र. के./E.R.L.D.C.
पोसोको / POSOCO.
कोलकाता - 33/Kolkata - 33

पंजीकृत एवं केन्द्रीय कार्यालय : प्रथम तल, बी 9, कतुब इंस्टिट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली - 110016

Registered & Corporate Office : 1st Floor, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110016

Website - www.posoco.in, E-mail : posococc@posoco.in

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पावर सिस्टम ऑपरेशन कॉर्पोरेशन लिमिटेड
(भारत सरकार का उद्यम)
POWER SYSTEM OPERATION CORPORATION LIMITED
(A Govt. of India Enterprise)
CIN : U40105DL2009GOI188682



पूर्वी क्षेत्रीय भार प्रेषण केन्द्र, 14, गोल्फ क्लब रोड, टॉलीगंज, कोलकाता - 700 033
EASTERN REGIONAL LOAD DESPATCH CENTRE, 14, Golf Club Road, Tollygunge, Kolkata - 700 033
Tel / दूरभाष : 033 2423 5867 / 5875 फेक्स : 033 2423 5809 / 5704 / 5029, E-mail / ई-मेल : erldc@posoco.in

प्रमाण पत्र संख्या/ Certificate Number: ERLDC/Trial Operation/2022/May/264

दिनांक/Date: 13/05/2022

ट्रांसमिशन एलिमेंट के परीक्षण संचालन के पूरा होने का प्रमाण पत्र
Certificate of completion of Trial Operation of Transmission Element

संदर्भ/Reference:

- Communication dated 12-03-2022 from Transmission Licensee to RLDC in Format-I.
- Communication from RLDC dated 15-03-2022 to Transmission Licensee in Format-II.
- Communication from Transmission Licensee to RLDC dated 24-03-2022 in Format III, IIIA, IIIB, IIIC and IIID.
- Provisional approval dated 17-04-2022 from RLDC to Transmission Licensee for charging through mail Format-IV.
- Real time code issued by RLDC on 22-04-2022.
- Communication dated 02-05-2022 from Transmission Licensee in Format-V after trial operation.

उपरोक्त संदर्भ के आधार पर, यह इस बात से प्रमाणित है कि निम्नलिखित ट्रांसमिशन एलिमेंट ने परीक्षण ऑपरेशन को सफलतापूर्वक पूरा कर लिया है।
Based on the above reference, it is hereby certified that the following Transmission element has successfully completed the trial operation:

ट्रांसमिशन एसेट का नाम Name of the Transmission Asset:	400 kV Saharsa Darbhanga Ckt 2 along with associated bay (Main Bay No: 424) at Saharsa SS. Only LIL Length 20.719 km owned by PGCIL*
ट्रांसमिशन एसेट का मालिक / Owner of the Transmission Asset :	Power Grid Corporation of India Limited (PGCIL)
सफल परीक्षण चलाने के संचालन के प्रारंभ होने की तारीख और समय/ Date and Time of Energization for commencement of successful trial run operation	15:39 hrs of 22.04.2022
सफल परीक्षण रन ऑपरेशन के पूरा होने की तारीख और समय/ Date and Time of completion of successful trial run operation	15:39 hrs of 23.04.2022

यह प्रमाण पत्र संचरण एलिमेंट के परीक्षण संचालन के सफल समापन को प्रमाणित करने के लिए सीईआरसी (भारतीय विद्युत ग्रिड कोड) विनियम, 2010 के विनियमन 6.3 (ए) (5) के अनुसार जारी किया जा रहा है। किसी अन्य उद्देश्य के लिए इस प्रमाण पत्र का उपयोग निषिद्ध है।

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

*LIL of 400 kV Darbhanga-Kishanganj D/C at Saharsa.

स्थान/Place: कोलकाता/Kolkata
प्रतिलिपि/Copy to:

- ED, PGCIL ERTS I
- Member Secretary, ERPC, 14, Golf Club Road, Tollygunge, Kolkata-700033
- Executive Director, NLDC, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016
- Chief Engineer, SLDC-Bihar/DVC/Jharkhand/Odisha/Sikkim/West Bengal



हस्ताक्षर/Signature

[Signature]
13/5/2022

Name and Designation of the
issuing officer with official seal

राजीव सुशर्मा / Rajib Suresh
वरिष्ठतक निरीक्षक / Executive Director
पूर्व. भार. के. / E.R.L.D.C.
पोसोको / POSOCO.
कोलकाता - 33/Kolkata - 33

पंजीकृत एवं केन्द्रीय कार्यालय : प्रथम तल, बी-9, कुतुब इंस्टिट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली - 110016
Registered & Corporate Office : 1st Floor, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110016
Website - www.posoco.in, E-mail : posococc@posoco.in

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पावर सिस्टम ऑपरेशन कॉर्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

POWER SYSTEM OPERATION CORPORATION LIMITED

(A Govt. of India Enterprise)

CIN : U40105DL2009GOI188682



पूर्वी क्षेत्रीय भार प्रेषण केन्द्र, 14, गोल्फ क्लब रोड, टॉलीगुंज, कोलकाता - 700 033
EASTERN REGIONAL LOAD DESPATCH CENTRE, 14, Golf Club Road, Tollygunge, Kolkata - 700 033
Tel / दुरभाष : 033 2423 5867 / 5875 फेक्स : 033 2423 5809 / 5704 / 5029, E-mail / ई-मेल : erldc@posoco.in

प्रमाण पत्र संख्या/ Certificate Number: ERLDC/Trial Operation/2022/May/263

दिनांक/Date: 13/05/2022

ट्रांसमिशन एलिमेंट के परीक्षण संचालन के पूरा होने का प्रमाण पत्र

Certificate of completion of Trial Operation of Transmission Element

संदर्भ/Reference:

- Communication dated 12-03-2022 from Transmission Licensee to RLDC in Format-I.
- Communication from RLDC dated 15-03-2022 to Transmission Licensee in Format-II.
- Communication from Transmission Licensee to RLDC dated 24-03-2022 in Format III, IIIA, IIIB, IIIC and IIID.
- Provisional approval dated 17-04-2022 from RLDC to Transmission Licensee for charging through mail Format-IV.
- Real time code issued by RLDC on 22-04-2022.
- Communication dated 02-05-2022 from Transmission Licensee in Format-V after trial operation.

उपरोक्त संदर्भ के आधार पर, यह इस बात से प्रमाणित है कि निम्नलिखित ट्रांसमिशन एलिमेंट ने परीक्षण ऑपरेशन को सफलतापूर्वक पूरा कर लिया है।
Based on the above reference, it is hereby certified that the following Transmission element has successfully completed the trial operation:

ट्रांसमिशन एसेट का नाम Name of the Transmission Asset:	400 kV, Saharsa Darbhanga Ckt 1 along with associated bay (Main Bay No: 421) at Saharsa SS. (Only LILO Length 20.719 km owned by PGCIL*)
ट्रांसमिशन एसेट का मालिक / Owner of the Transmission Asset :	Power Grid Corporation of India Limited (PGCIL)
सफल परीक्षण चलाने के संचालन के प्रारंभ होने की तारीख और समय/ Date and Time of Energization for commencement of successful trial run operation	15:16 hrs of 22.04.2022
सफल परीक्षण रन ऑपरेशन के पूरा होने की तारीख और समय/ Date and Time of completion of successful trial run operation	15:16 hrs of 23.04.2022

यह प्रमाण पत्र संचरण एलिमेंट के परीक्षण संचालन के सफल समापन को प्रमाणित करने के लिए सीईआरसी (भारतीय विद्युत ग्रिड कोड) विनियम, 2010 के विनियमन 6.3 (ए) (5) के अनुसार जारी किया जा रहा है। किसी अन्य उद्देश्य के लिए इस प्रमाण पत्र का उपयोग निषिद्ध है।

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

*LILO of 400 kV Darbhanga-Kishanganj D/C at Saharsa.



स्थान/Place: कोलकाता/Kolkata
प्रतिलिपि/Copy to:

- ED, PGCIL ERTS I
- Member Secretary, ERPC, 14, Golf Club Road, Tollygunge, Kolkata-700033
- Executive Director, NLDC, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016
- Chief Engineer, SLDC-Bihar/DVC/Jharkhand/Odisha/Sikkim/West Bengal

हस्ताक्षर/Signature

[Signature]
13/5/2022

Name and Designation of the
issuing officer with official seal

रवींद्र सुत्रार / Rajiv Sutrar
कार्यकारी निदेशक / Executive Director
पूर्वी.भा.प्रे.के./E.R.L.D.C.
पोसोको / POSOCO.
कोलकाता - 33/Kolkata - 33

पंजीकृत एवं केन्द्रीय कार्यालय : प्रथम तल, बी-9, कुतुब इंस्टिट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली - 110016

Registered & Corporate Office : 1st Floor, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110016

Website - www.posoco.in, E-mail : posococc@posoco.in

Annex-1.

Encl-4.

Summary of Tariff

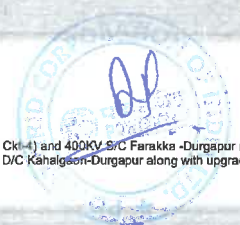
Form No. - 1

Name of the Transmission Licensee:	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Bypassing of 400 KV D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400KV S/C Farakka -Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400KV D/C Kahalgaon-Durgapur along with upgraded bays at Durgapur & Kahalgaon SS		
Region	Eastern Region	DOCO Date	Jan 2, 2022

(Amount in Rs. Lakh)

Particulars	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	89.00	365.00	366.00
Depreciation-Form No. 10A	0.00	0.00	22.12	94.86	97.98
Interest on Loan-Form No. 9E	0.00	0.00	16.75	84.05	88.41
Return on Equity-Form No. 8	0.00	0.00	22.87	98.22	101.55
Int. on Working capital-Form No.11	0.00	0.00	0.84	3.75	4.45
Op. and maintenance-Form No.2	0.00	0.00	0.73	3.12	3.23
Total AFC	0.00	0.00	63.31	284.00	295.62

(Petitioner)



Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	ERSS XXIII	
Element Description	Bypassing of 400 KV D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400KV S/C Farakka -Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400KV D/C Kahalgaon-Durgapur along with upgraded bays at Durgapur & Kahalgaon SS	
Region	Eastern Region	DOC Date Jan 2, 2022

1. Transmission Lines

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/ HVDC	S/C or D/C	No of Sub-Conductors	Voltage Level KV	Line Bays	Line Reactor (Including Switchable Reactor)	Line Length Km	Date of Commercial operation	Covered in the present petition	
									Yes/No	If No, Petition No.
BYPASSING OF 400 KV D/C FARAKKA-KAHALGAON (CKT-3 & CKT-4) AND 400 KV S/C FARAKKA-DURGAPUR (CKT-1 & CKT-2)	AC	DC	2	400 KV	0.000	0.000	3.190	Jan 2, 2022	Y	

Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
DOUBLE CIRCUIT (TWIN CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.00	0.00	0.944	0.977	1.011
No. of Units - (Length in KM)	0.00	0.00	3.19	3.19	3.19
O&M Claimed	0.00	0.00	0.73	3.12	3.23

2. Sub Station

Summary:



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	0.73	3.12	3.23
Substation	0.00	0.00	0.00	0.00	0.00
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	0.00	0.00	0.73	3.12	3.23
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition)					
*Security Expenses	0.00	0.00	0.00	0.00	0.00
*Actual Capital Spare consumed	0.00	0.00	0.00	0.00	0.00
*Insurance Premium Paid	0.00	0.00	0.00	0.00	0.00
Total O&M	0.00	0.00	0.73	3.12	3.23

Arvind
(Petitioner)



Financial Package upto COD

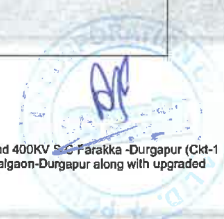
Form No. - 6

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Bypassing of 400 KV D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400KV S/C Farakka -Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400KV D/C Kahalgaon-Durgapur along with upgraded bays at Durgapur & Kahalgaon SS		
Region	Eastern Region	DOCO Date	Jan 2, 2022

(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	1,704.12	INR	1,135.67		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	730.34	INR	486.72		0.00
Total Equity	INR	730.34	INR	486.72		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	2,434.46	INR	1,622.39		0.00

Particulars	Debt	Equity	Total
Addcap for 2021 - 2022			84.87
Addcap for 2022 - 2023			71.82
Addcap for 2023 - 2024			46.24



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Particulars	Actual	Normative	
Addcap for 2021 - 2022			
Equity		25.46	
Debt		59.41	
Total		84.87	
Addcap for 2022 - 2023			
Equity		21.55	
Debt		50.27	
Total		71.82	
Addcap for 2023 - 2024			
Equity		13.87	
Debt		32.37	
Total		46.24	
Total Capital cost with Addcap		1,825.32	



Statement of Additional Capitalisation after COD

Form No. - 7

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Bypassing of 400 KV D/C Farakka-Kahalgaoon (Ckt-3 & Ckt-4) and 400KV S/C Farakka -Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400KV D/C Kahalgaoon-Durgapur along with upgraded bays at Durgapur & Kahalgaoon SS		
Region	Eastern Region	DOC Date	Jan 2, 2022

(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/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	33.29	33.29	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	51.58	51.58	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	84.87	84.87	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	38.73	38.73	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	31.62	31.62	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	1.47	1.47	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	71.82	71.82	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	45.64	45.64	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.60	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	46.24	46.24	0.00



Financing of Additional Capitalisation

Form No. - 7A

Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	ERSS XXIII	
Element Description	Bypassing of 400 KV D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400KV S/C Farakka -Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400KV D/C Kahalgaon-Durgapur along with upgraded bays at Durgapur & Kahalgaon SS	
Region	Eastern Region	DOC Date Jan 2, 2022

(Amount in Rs. Lakh)

Financial Year (Starting of COD)	Actual/Projected				Admitted			
	2019-20	2020-21	2021-22	2022-23	2023-24	2019-20	2020-21	2021-22
Amount capitalized in Work/ Equipment								
Financing Details								
Total Loan	0.00	0.00	59.41	50.27	32.37			
Equity	0.00	0.00	25.46	21.55	13.87			
Total	0.00	0.00	84.87	71.82	46.24			



Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Bypassing of 400 KV D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400KV S/C Farakka -Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400KV D/C Kahalgaon-Durgapur along with upgraded bays at Durgapur & Kahalgaon SS		
Region	Eastern Region	DOCO Date	Jan 2, 2022

(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	89.00	365.00	366.00
Opening Normative Equity	0.00	0.00	486.72	512.18	533.73
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	486.72	512.18	533.73
Add: Increase in Equity due to addition during the year / period	0.00	0.00	0.00	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	0.00	25.46	21.55	13.87
Closing Normative Equity	0.00	0.00	512.18	533.73	547.60
Average Normative Equity	0.00	0.00	499.45	522.96	540.67
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	93.81	98.22	101.55
Pro rata return on Equity	0.00	0.00	22.87	98.22	101.55

(Petitioner)

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Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Bypassing of 400 KV D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400KV S/C Farakka -Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400KV D/C Kahalgaon-Durgapur along with upgraded bays at Durgapur & Kahalgaon SS		
Region	Eastern Region	DOCO Date	Jan 2, 2022

(Amount in Rs. Lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
SBI-04 -ADD CAP 2022-23					
Gross Loan- Opening	0.00	0.00	0.00	0.00	17.69
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	1.67	1.67
Net loan-Opening	0.00	0.00	0.00	0.00	16.02
Add: Drawl(s) during the year	0.00	0.00	0.00	17.69	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	1.77
Net Loan-Closing	0.00	0.00	0.00	17.69	14.25
Average Net Loan	0.00	0.00	0.00	8.85	15.14
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	0.6395	1.2304

SBI-04 -ADD CAP LOAN					
Gross Loan- Opening	0.00	0.00	0.00	0.00	3.10
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.29	0.29
Net loan-Opening	0.00	0.00	0.00	0.00	2.81
Add: Drawl(s) during the year	0.00	0.00	0.00	3.10	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.31
Net Loan-Closing	0.00	0.00	0.00	3.10	2.50

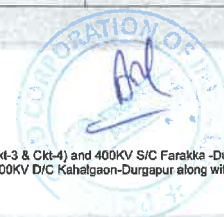
Average Net Loan	0.00	0.00	0.00	1.55	2.66
Rate of Interest on Loan on Annual Basis	0.00	0.00	6.65	7.225616	8.126549
Interest on loan	0.00	0.00	0.00	0.112	0.2162

SBI-04 -ADD CAP LOAN

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	0.49
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	5.18
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.52
Net Loan-Closing	0.00	0.00	0.00	0.00	4.66
Average Net Loan	0.00	0.00	0.00	0.00	2.33
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	0.1893

HDFC (Rs.5000 Cr.) -ADDCAP(ACCRUAL IDC)

Gross Loan- Opening	0.00	0.00	0.00	0.03	0.03
Cumulative repayments of Loans upto previous year	0.00	0.00	0.02	0.02	0.02
Net loan-Opening	0.00	0.00	0.00	0.01	0.01
Add: Drawl(s) during the year	0.00	0.00	0.03	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.03	0.01	0.01
Average Net Loan	0.00	0.00	0.02	0.01	0.01
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	0.0012	0.0007	0.0008



HDFC (Rs.5000 Cr.) -DOCO FUNDING					
Gross Loan- Opening	0.00	0.00	1,201.73	1,201.73	1,201.73
Cumulative repayments of Loans upto previous year	0.00	0.00	607.13	607.13	607.13
Net loan-Opening	0.00	0.00	594.60	594.60	594.60
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	594.60	594.60	594.60
Average Net Loan	0.00	0.00	594.60	594.60	594.60
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	35.3787	43.4962	48.1626

BOND LXIX (69) -ADD CAP LOAN					
Gross Loan- Opening	0.00	0.00	0.00	8.32	8.32
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	8.32	8.32
Add: Drawl(s) during the year	0.00	0.00	8.32	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	8.32	8.32	8.32
Average Net Loan	0.00	0.00	4.16	8.32	8.32
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	0.2517	0.5034	0.5034

Canara-01 -ADD CAP 2022-23					
Gross Loan- Opening	0.00	0.00	0.00	0.00	29.28
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	29.28

Add: Drawl(s) during the year	0.00	0.00	0.00	29.28	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	2.93
Net Loan-Closing	0.00	0.00	0.00	29.28	26.35
Average Net Loan	0.00	0.00	0.00	14.64	27.82
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.634924	8.15
Interest on loan	0.00	0.00	0.00	1.1178	2.2673

BOND LXXIII (73) -ADD CAP LOAN

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	8.05
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	8.05
Average Net Loan	0.00	0.00	0.00	0.00	4.03
Rate of Interest on Loan on Annual Basis	0.00	0.00	7.50	7.50	7.50
Interest on loan	0.00	0.00	0.00	0.00	0.3023

Bond LXXIV (74) -ADD CAP 2023-24

Gross Loan- Opening	0.00	0.00	0.00	0.00	0.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	11.11
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	11.11
Average Net Loan	0.00	0.00	0.00	0.00	5.56

Rate of Interest on Loan on Annual Basis	0.00	0.00	7.70	7.70	7.70
Interest on loan	0.00	0.00	0.00	0.00	0.4281

Summary

Gross Loan- Opening	0.00	0.00	1,201.73	1,210.08	1,260.15
Cumulative repayments of Loans upto previous year	0.00	0.00	607.15	609.11	609.60
Net loan-Opening	0.00	0.00	594.60	602.93	651.04
Add: Drawl(s) during the year	0.00	0.00	8.35	50.07	24.34
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	5.53
Net Loan-Closing	0.00	0.00	602.95	653.00	669.85
Average Net Loan	0.00	0.00	598.78	627.97	660.47
Rate of Interest on Loan on Annual Basis	0.00	0.00	5.9507	7.3044	8.0701
Interest on loan	0.00	0.00	35.6316	45.8696	53.3004



Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Bypassing of 400 KV D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400KV S/C Farakka -Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400KV D/C Kahalgaon-Durgapur along with upgraded bays at Durgapur & Kahalgaon SS		
Region	Eastern Region	DOC Date	Jan 2, 2022

(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	89.00	365.00	366.00
Gross normative loan-Opening	0.00	0.00	1,135.67	1,195.08	1,245.35
Cumulative repayments of Normative loan upto previous year	0.00	0.00	0.00	22.12	116.98
Net normative loan-Opening	0.00	0.00	1,135.67	1,172.96	1,128.37
Addition in normative loan towards the ACE	0.00	0.00	59.41	50.27	32.37
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	22.12	94.86	97.98
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	1,172.96	1,128.37	1,062.76
Average normative loan	0.00	0.00	1,154.32	1,150.67	1,095.57
Weighted Average Rate of interest on actual loan	0.00	0.00	5.9507	7.3044	8.0701
Interest on normative loan	0.00	0.00	68.69	84.05	88.41
Pro rata interest on normative loan	0.00	0.00	16.75	84.05	88.41

(Petitioner)

Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Bypassing of 400 KV D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400KV S/C Farakka -Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400KV D/C Kahalgaon-Durgapur along with upgraded bays at Durgapur & Kahalgaon SS		
Region	Eastern Region	DOCO Date	Jan 2, 2022

(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	994.66	33.29	1,027.95	1,011.31	5.28	13.02
Sub Station	360.08	51.58	411.66	385.87	5.28	4.97
Comm. Sys. excluding Fiber Optic	126.84	0.00	126.84	126.84	6.33	1.96
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	140.81	0.00	140.81	140.81	6.33	2.17
TOTAL	1,622.39	84.87	1,707.26	1,664.83	0.00	22.12
Weighted Average Rate of Depreciation(%)					1.328664	

2022-23

Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
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Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	1,027.95	38.73	1,066.68	1,047.32	5.28	55.30
Sub Station	411.66	31.62	443.28	427.47	5.28	22.57
Comm. Sys. excluding Fiber Optic	126.84	1.47	128.31	127.58	6.33	8.08
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	140.81	0.00	140.81	140.81	6.33	8.91
TOTAL	1,707.26	71.82	1,779.08	1,743.18	0.00	94.86
Weighted Average Rate of Depreciation(%)					5.441779	

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	1,066.68	0.00	1,066.68	1,066.68	5.28	56.32
Sub Station	443.28	45.64	488.92	466.10	5.28	24.61
Comm. Sys. excluding Fiber Optic	128.31	0.60	128.91	128.61	6.33	8.14
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	140.81	0.00	140.81	140.81	6.33	8.91
TOTAL	1,779.08	46.24	1,825.32	1,802.20	0.00	97.98
Weighted Average Rate of Depreciation(%)					5.436688	



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Statement of Depreciation


Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Bypassing of 400 KV D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400KV S/C Farakka -Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400KV D/C Kahalgaon-Durgapur along with upgraded bays at Durgapur & Kahalgaon SS		
Region	Eastern Region	DOCO Date	Jan 2, 2022

(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	89.00	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	29.00	29.00	29.00
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	29.00	29.00	28.00
Capital Base					
1.4 Opening capital cost	0.00	0.00	1,622.39	1,707.26	1,779.08
1.5 Additional Capital Expenditure dr. the year	0.00	0.00	84.87	71.82	46.24
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	1,707.26	1,779.08	1,825.32
1.8 Average capital cost	0.00	0.00	1,664.83	1,743.18	1,802.20
1.9 Freehold land included in 1.8	0.00	0.00	0.00	0.00	0.00
1.10 Asset having NIL salvage value included in 1.8	0.00	0.00	0.00	0.00	0.00
1.11 Asset having 10% salvage value included in 1.8	0.00	0.00	1,664.83	1,743.18	1,802.20
1.12 Depreciable Value(1.10+90% of 1.11)	0.00	0.00	1,498.35	1,568.86	1,621.98
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	0.00	0.00	1.328664	5.441779	5.436688

1.14 Depreciation(for the period)	0.00	0.00	22.12	94.86	97.98
1.15 Depreciation(Annualised)	0.00	0.00	22.12	94.86	97.98
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	0.00	0.00	0.00	22.12	116.98
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	22.12	116.98	214.96


(Petitioner)

Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Bypassing of 400 KV D/C Farakka-Kahalgaon (Ckt-3 & Ckt-4) and 400KV S/C Farakka -Durgapur (Ckt-1 & Ckt-2) existing transmission line from NTPC, Farakka so as to form 400KV D/C Kahalgaon-Durgapur along with upgraded bays at Durgapur & Kahalgaon SS		
Region	Eastern Region	DOCO Date	Jan 2, 2022

(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	89.00	365.00	366.00
O&M Expenses-one month	0.00	0.00	0.25	0.26	0.27
Maintenance spares 15% of O&M Expenses	0.00	0.00	0.45	0.47	0.48
Receivables equivalent to 45 days of AFC	0.00	0.00	32.01	35.01	36.35
Total Working capital	0.00	0.00	32.71	35.74	37.10
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	3.43	3.75	4.45
Pro rata interest on working capital	0.00	0.00	0.84	3.75	4.45



Asst-2.

Summary of Tariff

Form No. - 1

Name of the Transmission Licensee:	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station		
Region	Eastern Region	DOCO Date	Apr 8, 2022

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Year Days	0.00	0.00	0.00	365.00	366.00
Tariff Days	0.00	0.00	0.00	358.00	366.00
Depreciation-Form No. 10A	0.00	0.00	0.00	189.19	210.18
Interest on Loan-Form No. 9E	0.00	0.00	0.00	174.36	197.66
Return on Equity-Form No. 8	0.00	0.00	0.00	201.87	224.27
Int. on Working capital-Form No.11	0.00	0.00	0.00	16.80	20.78
Op. and maintenance-Form No.2	0.00	0.00	0.00	247.41	260.62
Total AFC	0.00	0.00	0.00	829.63	913.51



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Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	ERSS XXIII	
Element Description	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station	
Region	Eastern Region	DOC Date Apr 8, 2022

1. Transmission Lines

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/HVDC	S/C or D/C	No of Sub-Conductors	Voltage Level KV	Line Bays	Line Reactor (Including Switchable Reactor)	Line Length Km	Date of Commercial operation	Covered in the present petition	
									Yes/No	If No, Petition No.
220KV CABLE FROM ICT TO GIS BAY	AC	SC	1	220 KV	0.000	0.000	0.420	Apr 8, 2022	Y	

Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
SINGLE CIRCUIT (SINGLE CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.00	0.00	0.00	0.279	0.289
No. of Units - (Length in KM)	0.00	0.00	0.00	0.42	0.42
O&M Claimed	0.00	0.00	0.00	0.11	0.12



2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transfor ms/ Reactor/ SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV		
Muzaffarpur:ICT4_ 400KVSIDE_MAIN_BAY_1_418		400 KV			1.000							Apr 8, 2022	Y
Muzaffarpur:ICT4_ TRANSFORMER_BAY_214		220 KV				1.000						Apr 8, 2022	Y
Muzaffarpur:ICT-IV AT MUZAFFARPUR		400 KV	1.000						500.00			Apr 8, 2022	Y

Summary:

O&M Expenses For Substations Covered in the instant petition												
400KV SUB-STATION												
Normative Rate of O&M as per Regulation												
No. of Units				0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	36.91
O&M Claimed				0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.98	36.91
400KV SUB-STATION ICT												
Normative Rate of O&M as per Regulation												
No. of Units				0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.411
O&M Claimed				0.00	0.00	0.00	0.00	0.00	0.00	0.00	195.18	205.50

220 kV GIS Substation

Normative Rate of O&M as per Regulation	0.00	0.00	0.00	0.00	17.472	18.088
No. of Units	0.00	0.00	0.00	0.00	1.00	1.00
O&M Claimed	0.00	0.00	0.00	0.00	17.14	18.09



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	0.11	0.12
Substation	0.00	0.00	0.00	247.30	260.50
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	0.00	0.00	0.00	247.41	260.62
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition)					
*Security Expenses	0.00	0.00	0.00	0.00	0.00
*Actual Capital Spare consumed	0.00	0.00	0.00	0.00	0.00
*Insurance Premium Paid	0.00	0.00	0.00	0.00	0.00
Total O&M	0.00	0.00	0.00	247.41	260.62



Financial Package upto COD

Form No. - 6

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station		
Region	Eastern Region	DOCO Date	Apr 8, 2022

(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	2,223.494	INR	2,337.28		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	952.926	INR	1,001.59		0.00
Total Equity	INR	952.926	INR	1,001.59		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	3,176.42	INR	3,338.87		0.00

Particulars	Debt	Equity	Total
Addcap for 2022 - 2023			628.36
Addcap for 2023 - 2024			26.54

Particulars	Actual	Normative
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176

Addcap for 2022 - 2023			
Equity		188.51	
Debt		439.85	
Total		628.36	
Addcap for 2023 - 2024			
Equity		7.96	
Debt		18.58	
Total		26.54	
Total Capital cost with Addcap		3,993.77	



Statement of Additional Capitalisation after COD

Form No. - 7

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station		
Region	Eastern Region	DOCO Date	Apr 8, 2022

(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/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	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 :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	0.00	0.00	0.00	0.00	0.00	0.00	628.36	628.36	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	628.36	628.36	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	26.54	26.54	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	26.54	26.54	0.00


(Petitioner)

Financing of Additional Capitalisation

Form No. - 7A

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	ERSS XXIII		
Element Description	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station		
Region	Eastern Region	DOCO Date	Apr 8, 2022

(Amount in Rs. Lakh)

Financial Year (Starting of COD)	Actual/Projected				Admitted			
	2019-20	2020-21	2021-22	2022-23	2023-24	2019-20	2020-21	2021-22
Amount capitalized in Work/ Equipment								
Financing Details								
Total Loan	0.00	0.00	0.00	439.85	18.58			
Equity	0.00	0.00	0.00	188.51	7.96			
Total	0.00	0.00	0.00	628.36	26.54			



Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station		
Region	Eastern Region	DOCO Date	Apr 8, 2022

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the year	0.00	0.00	0.00	365.00	366.00
No. of days for which tariff claimed	0.00	0.00	0.00	358.00	366.00
Opening Normative Equity	0.00	0.00	0.00	1,001.59	1,190.10
Less: Adjustment in Equity*	0.00	0.00	0.00	0.00	0.00
Adjustment during the year	0.00	0.00	0.00	0.00	0.00
Net opening equity (Normal)	0.00	0.00	0.00	1,001.59	1,190.10
Add: Increase in Equity due to addition during the year / period	0.00	0.00	0.00	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	0.00	0.00	188.51	7.96
Closing Normative Equity	0.00	0.00	0.00	1,190.10	1,198.06
Average Normative Equity	0.00	0.00	0.00	1,095.85	1,194.08
Rate of return on Equity (%)	0.00	0.00	0.00	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	0.00	15.50	15.50
MAT/Corporate Rate	0.00	0.00	0.00	17.472	17.472
Grossed up rate of ROE	0.00	0.00	0.00	18.782	18.782
Return on Equity	0.00	0.00	0.00	205.82	224.27
Pro rata return on Equity	0.00	0.00	0.00	201.87	224.27

(Petitioner)

Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	ERSS XXIII				
Element Description	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station				
Region	Eastern Region	DOCO Date	Apr 8, 2022		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
SBI-04 -ADD CAP LOAN					
Gross Loan- Opening	0.00	0.00	0.00	0.00	336.87
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	31.80	31.80
Net loan-Opening	0.00	0.00	0.00	0.00	305.07
Add: Drawl(s) during the year	0.00	0.00	0.00	336.87	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	33.69
Net Loan-Closing	0.00	0.00	0.00	336.87	271.38
Average Net Loan	0.00	0.00	0.00	168.44	288.23
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.236872	8.126549
Interest on loan	0.00	0.00	0.00	12.1898	23.4232

SBI-04 -ADD CAP LOAN					
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	0.32
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	3.34
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.33
Net Loan-Closing	0.00	0.00	0.00	0.00	3.01

Average Net Loan	0.00	0.00	0.00	0.00	1.51
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.236872	8.126549
Interest on loan	0.00	0.00	0.00	0.00	0.1227

HDFC (Rs.5000 Cr.) -ADDCAP(ACCRUAL IDC)

Gross Loan- Opening	0.00	0.00	0.00	0.00	0.23
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.12	0.12
Net loan-Opening	0.00	0.00	0.00	0.00	0.11
Add: Drawl(s) during the year	0.00	0.00	0.00	0.23	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.23	0.11
Average Net Loan	0.00	0.00	0.00	0.12	0.11
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.341899	8.10
Interest on loan	0.00	0.00	0.00	0.0088	0.0089

HDFC (Rs.5000 Cr.) -DOCO FUNDING

Gross Loan- Opening	0.00	0.00	0.00	2,374.20	2,374.20
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	1,199.47	1,199.47
Net loan-Opening	0.00	0.00	0.00	1,174.73	1,174.73
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	1,174.73	1,174.73
Average Net Loan	0.00	0.00	0.00	1,174.73	1,174.73
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.341899	8.10
Interest on loan	0.00	0.00	0.00	86.2475	95.1531

BOND LXIX (69) -DOCO FUNDING

Gross Loan- Opening	0.00	0.00	0.00	144.64	144.64
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	144.64	144.64
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	144.64	144.64
Average Net Loan	0.00	0.00	0.00	144.64	144.64
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	6.05	6.05
Interest on loan	0.00	0.00	0.00	8.7507	8.7507

Canara-01 -ADD CAP LOAN

Gross Loan- Opening	0.00	0.00	0.00	0.00	100.98
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	100.98
Add: Drawl(s) during the year	0.00	0.00	0.00	100.98	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	10.10
Net Loan-Closing	0.00	0.00	0.00	100.98	90.88
Average Net Loan	0.00	0.00	0.00	50.49	95.93
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.634924	8.15
Interest on loan	0.00	0.00	0.00	3.8549	7.8183

BOND LXX (70) -ADD CAP LOAN

Gross Loan- Opening	0.00	0.00	0.00	0.00	2.00
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	2.00

Add: Drawl(s) during the year	0.00	0.00	0.00	2.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.20
Net Loan-Closing	0.00	0.00	0.00	2.00	1.80
Average Net Loan	0.00	0.00	0.00	1.00	1.90
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.40	7.40
Interest on loan	0.00	0.00	0.00	0.074	0.1406

BOND LXXI (71) -ADD CAP LOAN

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	10.90
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.82
Net Loan-Closing	0.00	0.00	0.00	0.00	10.08
Average Net Loan	0.00	0.00	0.00	0.00	5.04
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.52	7.52
Interest on loan	0.00	0.00	0.00	0.00	0.379

BOND LXXII (72) -ADD CAP LOAN

Gross Loan- Opening	0.00	0.00	0.00	0.00	0.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.36
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.03
Net Loan-Closing	0.00	0.00	0.00	0.00	0.33
Average Net Loan	0.00	0.00	0.00	0.00	0.17

Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.56	7.56
Interest on loan	0.00	0.00	0.00	0.00	0.0129

BOND LXXIII (73) -ADD CAP LOAN					
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	1.98
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	1.98
Average Net Loan	0.00	0.00	0.00	0.00	0.99
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.50	7.50
Interest on loan	0.00	0.00	0.00	0.00	0.0743

Bond LXXV (75) -ADD CAP LOAN					
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	2.00
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	2.00
Average Net Loan	0.00	0.00	0.00	0.00	1.00
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.65	7.65
Interest on loan	0.00	0.00	0.00	0.00	0.0765

Summary



Gross Loan- Opening	0.00	0.00	0.00	2,518.84	2,958.92
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	1,231.39	1,231.71
Net loan-Opening	0.00	0.00	0.00	1,319.37	1,727.53
Add: Drawl(s) during the year	0.00	0.00	0.00	440.08	18.58
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	45.17
Net Loan-Closing	0.00	0.00	0.00	1,759.45	1,700.94
Average Net Loan	0.00	0.00	0.00	1,539.42	1,714.25
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.2187	7.9312
Interest on loan	0.00	0.00	0.00	111.1257	135.9602


(Petitioner)

Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station		
Region	Eastern Region	DOCO Date	Apr 8, 2022

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the Year	0.00	0.00	0.00	365.00	366.00
No. of days for which Tariff claimed	0.00	0.00	0.00	358.00	366.00
Gross normative loan-Opening	0.00	0.00	0.00	2,337.28	2,777.13
Cumulative repayments of Normative loan upto previous year	0.00	0.00	0.00	0.00	189.19
Net normative loan-Opening	0.00	0.00	0.00	2,337.28	2,587.94
Addition in normative loan towards the ACE	0.00	0.00	0.00	439.85	18.58
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	0.00	0.00	0.00	189.19	210.18
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	0.00	0.00	0.00	2,587.94	2,396.34
Average normative loan	0.00	0.00	0.00	2,462.61	2,492.14
Weighted Average Rate of interest on actual loan	0.00	0.00	0.00	7.2187	7.9312
Interest on normative loan	0.00	0.00	0.00	177.77	197.66
Pro rata interest on normative loan	0.00	0.00	0.00	174.36	197.66



Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station		
Region	Eastern Region	DOCO Date	Apr 8, 2022

(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
2022-23						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	3,338.97	628.36	3,967.33	3,653.15	5.28	189.19
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/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	3,338.97	628.36	3,967.33	3,653.15	0.00	189.19
Weighted Average Rate of Depreciation(%)					5.178818	

2023-24						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00

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Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	3,967.33	26.54	3,993.87	3,980.60	5.28	210.18
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/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	3,967.33	26.54	3,993.87	3,980.60	0.00	210.18
Weighted Average Rate of Depreciation(%)					5.280109	



Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station		
Region	Eastern Region	DOCO Date	Apr 8, 2022

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	0.00	0.00	0.00	365.00	366.00
No of days for which tariff claimed	0.00	0.00	0.00	358.00	366.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/Project	0.00	0.00	0.00	25.00	25.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	0.00	0.00	0.00	0.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	0.00	0.00	25.00	25.00
Capital Base					
1.4 Opening capital cost	0.00	0.00	0.00	3,338.97	3,967.33
1.5 Additional Capital Expenditure dr. the year	0.00	0.00	0.00	628.36	26.54
1.6 De-Capitalisation During the year	0.00	0.00	0.00	0.00	0.00
1.7 Closing capital cost	0.00	0.00	0.00	3,967.33	3,993.87
1.8 Average capital cost	0.00	0.00	0.00	3,653.15	3,980.60
1.9 Freehold land included in 1.8	0.00	0.00	0.00	0.00	0.00
1.10 Asset having NIL salvage value included in 1.8	0.00	0.00	0.00	0.00	0.00
1.11 Asset having 10% salvage value included in 1.8	0.00	0.00	0.00	3,653.15	3,980.60
1.12 Depreciable Value(1.10+90% of 1.11)	0.00	0.00	0.00	3,287.84	3,582.54
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	0.00	0.00	0.00	5.178818	5.280109

1.14 Depreciation(for the period)	0.00	0.00	0.00	189.19	210.18
1.15 Depreciation(Annualised)	0.00	0.00	0.00	189.19	210.18
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	0.00	0.00	0.00	0.00	189.19
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	0.00	0.00	0.00	189.19	399.37



Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) alongwith 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) alongwith 220 kV Cable from ICT to GIS bay at Muzaffarpur (POWERGRID) 400/220 kV sub-station		
Region	Eastern Region	DOCO Date	Apr 8, 2022

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	0.00	0.00	0.00	365.00	366.00
No of days for which tariff claimed	0.00	0.00	0.00	358.00	366.00
O&M Expenses-one month	0.00	0.00	0.00	21.02	21.72
Maintenance spares 15% of O&M Expenses	0.00	0.00	0.00	37.84	39.09
Receivables equivalent to 45 days of AFC	0.00	0.00	0.00	104.28	112.32
Total Working capital	0.00	0.00	0.00	163.14	173.13
Bank Rate as on 01.04.2019 or as on 01st April of the COD year, whichever is later.	0.00	0.00	0.00	10.50	12.00
Interest on working capital	0.00	0.00	0.00	17.13	20.78
Pro rata interest on working capital	0.00	0.00	0.00	16.80	20.78



Asset -3

Summary of Tariff

Form No. - 1

Name of the Transmission Licensee:	Power Grid Corporation of India Limited				
Project	ERSS XXIII				
Element Description	LILO of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400kV Line Bays at Saharsa-New (POWERGRID) sub-station				
Region	Eastern Region	DOCO Date	Apr 28, 2022		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Year Days	0.00	0.00	0.00	365.00	366.00
Tariff Days	0.00	0.00	0.00	338.00	366.00
Depreciation-Form No. 10A	0.00	0.00	0.00	678.28	757.46
Interest on Loan-Form No. 9E	0.00	0.00	0.00	541.11	574.72
Return on Equity-Form No. 8	0.00	0.00	0.00	718.88	802.98
Int. on Working capital-Form No.11	0.00	0.00	0.00	32.44	40.94
Op. and maintenance-Form No.2	0.00	0.00	0.00	184.92	206.68
Total AFC	0.00	0.00	0.00	2,155.63	2,382.78



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Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	ERSS XXIII	
Element Description	L.I.O of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 KV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400kV Line Bays at Saharsa-New (POWERGRID) sub-station	
Region	Eastern Region	DOC Date Apr 28, 2022

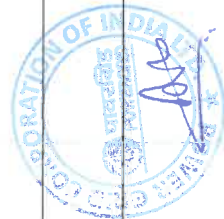
1. Transmission Lines

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/ HVDC	S/C or D/C	No of Sub-Conductors	Voltage Level KV	Line Bays	Line Reactor (Including Switchable Reactor)	Line Length Km	Date of Commercial operation	Covered in the present petition	
									Yes/No	If No, Petition No.
400KV D/C SAHARSA-DARBHANGA LOOP OUT LINE CKT 1&2	AC	DC	4	400 KV	0.000	0.000	20.720	Apr 28, 2022	Y	
400KV D/C SAHARSA-KISHANGANJ LOOP IN LINE CKT 1&2	AC	DC	4	400 KV	0.000	0.000	18.200	Apr 28, 2022	Y	

Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
DOUBLE CIRCUIT (BUNDLE CONDUCTOR WITH FOUR SUB-CONDUCTORS)					
Normative Rate of O&M as per Regulation	0.00	0.00	0.00	1.466	1.517
No. of Units - (Length in KM)	0.00	0.00	0.00	38.92	38.92



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O&M Claimed	0.00	0.00	0.00	52.84	59.04
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2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transfor ms/ Reactor/ SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV		
Er1 common:KISHANGANJ-III LINE BAY_419		400 KV			1.000							Apr 28, 2022	Y
Er1 common:KISHANGANJ-IV LINE BAY_422		400 KV			1.000							Apr 28, 2022	Y
Er1 common:DARBHANGA-I LINE BAY_421		400 KV			1.000							Apr 28, 2022	Y
Er1 common:DARBHANGA-I LINE BAY_424		400 KV			1.000							Apr 28, 2022	Y

Summary:

O&M Expenses For Substations Covered in the instant petition		2019-20	2020-21	2021-22	2022-23	2023-24
400KV SUB-STATION						
Normative Rate of O&M as per Regulation		0.00	0.00	0.00	35.66	36.91
No. of Units		0.00	0.00	0.00	4.00	4.00
O&M Claimed		0.00	0.00	0.00	132.08	147.64



3. Communication System

Summary:

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Summary of O&M Expenses claim

(Amount in Rs. Lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M					
Transmission Line	0.00	0.00	0.00	52.84	59.04
Substation	0.00	0.00	0.00	132.08	147.64
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	0.00	0.00	0.00	184.92	206.68
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	0.00	184.92	206.68


(Petitioner)

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Financial Package upto COD

Form No. - 6

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	LILo of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400kV Line Bays at Saharsa-New (POWERGRID) sub-station		
Region	Eastern Region	DOCO Date	Apr 28, 2022

(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	12,864.838	INR	9,374.74		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	5,513.502	INR	4,017.75		0.00
Total Equity	INR	5,513.502	INR	4,017.75		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	18,378.34	INR	13,392.49		0.00

Particulars	Debt	Equity	Total
Addcap for 2022 - 2023			769.71
Addcap for 2023 - 2024			177.30

Particulars	Actual	Normative
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Addcap for 2022 - 2023			
Equity		230.91	
Debt		538.80	
Total		769.71	
Addcap for 2023 - 2024			
Equity		53.19	
Debt		124.11	
Total		177.30	
Total Capital cost with Addcap		14,339.50	


 (Petitioner)

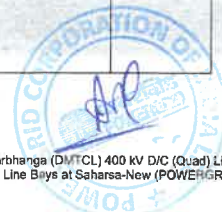
Statement of Additional Capitalisation after COD

Form No. - 7

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	LILO of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400kV Line Bays at Saharsa-New (POWERGRID) sub-station		
Region	Eastern Region	DOCO Date	Apr 28, 2022

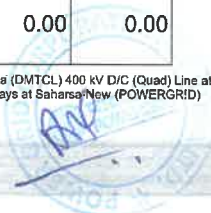
(Amount in Rs. Lakh)

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/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2020-21 (Actual/Projected)									



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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	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 :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	300.00	0.00	0.00	0.00	0.00	0.00	227.20	527.20	0.00
Substations	204.00	0.00	0.00	0.00	0.00	0.00	38.51	242.51	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	504.00	0.00	0.00	0.00	0.00	0.00	265.71	769.71	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	81.48	81.48	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	95.82	95.82	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	177.30	177.30	0.00



Financing of Additional Capitalisation

Form No. - 7A

Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	ERSS XXIII	
Element Description	LILO of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400kV Line Bays at Saharsa-New (POWERGRID) sub-station	
Region	Eastern Region	DOCO Date Apr 28, 2022

(Amount in Rs. Lakh)

Financial Year (Starting of COD)	Actual/Projected					Admitted			
	2019-20	2020-21	2021-22	2022-23	2023-24	2019-20	2020-21	2021-22	2022-23
Amount capitalized in Work/ Equipment									
Financing Details									
Total Loan	0.00	0.00	0.00	538.80	124.11				
Equity	0.00	0.00	0.00	230.91	53.19				
Total	0.00	0.00	0.00	769.71	177.30				

POWER GRID CORPORATION OF INDIA LTD.
(Petitioner)

Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	ERSS XXIII				
Element Description	LILO of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400kV Line Bays at Saharsa-New (POWERGRID) sub-station				
Region	Eastern Region	DOC Date	Apr 28, 2022		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the year	0.00	0.00	0.00	365.00	366.00
No. of days for which tariff claimed	0.00	0.00	0.00	338.00	366.00
Opening Normative Equity	0.00	0.00	0.00	4,017.75	4,248.66
Less: Adjustment in Equity*	0.00	0.00	0.00	0.00	0.00
Adjustment during the year	0.00	0.00	0.00	0.00	0.00
Net opening equity (Normal)	0.00	0.00	0.00	4,017.75	4,248.66
Add: Increase in Equity due to addition during the year / period	0.00	0.00	0.00	151.20	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	0.00	0.00	79.71	53.19
Closing Normative Equity	0.00	0.00	0.00	4,248.66	4,301.85
Average Normative Equity	0.00	0.00	0.00	4,133.21	4,275.26
Rate of return on Equity (%)	0.00	0.00	0.00	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	0.00	15.50	15.50
MAT/Corporate Rate	0.00	0.00	0.00	17.472	17.472
Grossed up rate of ROE	0.00	0.00	0.00	18.782	18.782
Return on Equity	0.00	0.00	0.00	776.30	802.98
Pro rata return on Equity	0.00	0.00	0.00	718.88	802.98

(Petitioner)

Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	ERSS XXIII				
Element Description	LILO of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400kV Line Bays at Saharsa-New (POWERGRID) sub-station				
Region	Eastern Region	DOC Date	Apr 28, 2022		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
SBI-04 -ADD CAP LOAN					
Gross Loan- Opening	0.00	0.00	0.00	0.00	432.43
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	40.82	40.82
Net loan-Opening	0.00	0.00	0.00	0.00	391.61
Add: Drawl(s) during the year	0.00	0.00	0.00	432.43	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	43.24
Net Loan-Closing	0.00	0.00	0.00	432.43	348.37
Average Net Loan	0.00	0.00	0.00	216.22	369.99
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.271598	8.126475
Interest on loan	0.00	0.00	0.00	15.7226	30.0671

SBI-04 -ADD CAP LOAN					
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	1.75
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	18.52
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	1.85
Net Loan-Closing	0.00	0.00	0.00	0.00	16.67

Average Net Loan	0.00	0.00	0.00	0.00	8.34
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.271598	8.126475
Interest on loan	0.00	0.00	0.00	0.00	0.6777

HDFC (Rs.5000 Cr.) -ADDCAP(ACCRUAL IDC)

Gross Loan- Opening	0.00	0.00	0.00	0.00	28.88
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	14.59	14.59
Net loan-Opening	0.00	0.00	0.00	0.00	14.29
Add: Drawl(s) during the year	0.00	0.00	0.00	28.88	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	28.88	14.29
Average Net Loan	0.00	0.00	0.00	14.44	14.29
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.42426	8.10
Interest on loan	0.00	0.00	0.00	1.0721	1.1575

HDFC (Rs.5000 Cr.) -DOCO FUNDING

Gross Loan- Opening	0.00	0.00	0.00	2,445.95	2,445.95
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	1,235.72	1,235.72
Net loan-Opening	0.00	0.00	0.00	1,210.23	1,210.23
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	1,210.23	1,210.23
Average Net Loan	0.00	0.00	0.00	1,210.23	1,210.23
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.42426	8.10
Interest on loan	0.00	0.00	0.00	89.8506	98.0286

BOND LXIX (69) -DOCO FUNDING

Gross Loan- Opening	0.00	0.00	0.00	7,340.56	7,340.56
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	7,340.56	7,340.56
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	7,340.56	7,340.56
Average Net Loan	0.00	0.00	0.00	7,340.56	7,340.56
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	6.05	6.05
Interest on loan	0.00	0.00	0.00	444.1039	444.1039

Canara-01 -ADD CAP LOAN

Gross Loan- Opening	0.00	0.00	0.00	0.00	106.37
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	106.37
Add: Drawl(s) during the year	0.00	0.00	0.00	106.37	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	10.64
Net Loan-Closing	0.00	0.00	0.00	106.37	95.73
Average Net Loan	0.00	0.00	0.00	53.19	101.05
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.634924	8.15
Interest on loan	0.00	0.00	0.00	4.061	8.2356

BOND LXXII (72) -ADD CAP LOAN

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	50.29
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	3.77
Net Loan-Closing	0.00	0.00	0.00	0.00	46.52
Average Net Loan	0.00	0.00	0.00	0.00	23.26
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.56	7.56
Interest on loan	0.00	0.00	0.00	0.00	1.7585

BOND LXXIII (73) -ADD CAP LOAN

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	36.62
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	36.62
Average Net Loan	0.00	0.00	0.00	0.00	18.31
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.50	7.50
Interest on loan	0.00	0.00	0.00	0.00	1.3733

Bond LXXIV (74) -ADD CAP LOAN

Gross Loan- Opening	0.00	0.00	0.00	0.00	0.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.68
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.68
Average Net Loan	0.00	0.00	0.00	0.00	0.34



Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.70	7.70
Interest on loan	0.00	0.00	0.00	0.00	0.0262

Bond LXXV (75) -ADD CAP LOAN

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	18.00
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	18.00
Average Net Loan	0.00	0.00	0.00	0.00	9.00
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.65	7.65
Interest on loan	0.00	0.00	0.00	0.00	0.6885

Summary

Gross Loan- Opening	0.00	0.00	0.00	9,786.51	10,354.19
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	1,291.13	1,292.88
Net loan-Opening	0.00	0.00	0.00	8,550.79	9,063.06
Add: Drawl(s) during the year	0.00	0.00	0.00	567.68	124.11
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	59.50
Net Loan-Closing	0.00	0.00	0.00	9,118.47	9,127.67
Average Net Loan	0.00	0.00	0.00	8,834.64	9,095.37
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	6.2799	6.4441
Interest on loan	0.00	0.00	0.00	554.8102	586.1169

(Petitioner)

Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	LILO of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400kV Line Bays at Saharsa-New (POWERGRID) sub-station		
Region	Eastern Region	DOCO Date	Apr 28, 2022

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the Year	0.00	0.00	0.00	365.00	366.00
No. of days for which Tariff claimed	0.00	0.00	0.00	338.00	366.00
Gross normative loan-Opening	0.00	0.00	0.00	9,374.74	9,913.54
Cumulative repayments of Normative loan upto previous year	0.00	0.00	0.00	0.00	678.28
Net normative loan-Opening	0.00	0.00	0.00	9,374.74	9,235.26
Addition in normative loan towards the ACE	0.00	0.00	0.00	538.80	124.11
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	0.00	0.00	0.00	678.28	757.46
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	0.00	0.00	0.00	9,235.26	8,601.91
Average normative loan	0.00	0.00	0.00	9,305.00	8,918.59
Weighted Average Rate of interest on actual loan	0.00	0.00	0.00	6.2799	6.4441
Interest on normative loan	0.00	0.00	0.00	584.34	574.72
Pro rata interest on normative loan	0.00	0.00	0.00	541.11	574.72

(Petitioner)

Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	LILO of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400kV Line Bays at Saharsa-New (POWERGRID) sub-station		
Region	Eastern Region	DOCO Date	Apr 28, 2022

(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
2022-23						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	11,356.60	527.20	11,883.80	11,620.20	5.28	568.16
Sub Station	1,848.31	242.51	2,090.82	1,969.57	5.28	96.30
Comm. Sys. excluding Fiber Optic	152.53	0.00	152.53	152.53	6.33	8.95
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	35.05	0.00	35.05	35.05	15.00	4.87
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	13,392.49	769.71	14,162.20	13,777.35	0.00	678.28
Weighted Average Rate of Depreciation(%)					4.923153	

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	11,883.80	81.48	11,965.28	11,924.54	5.28	629.62
Sub Station	2,090.82	95.82	2,186.64	2,138.73	5.28	112.92
Comm. Sys. excluding Fiber Optic	152.53	0.00	152.53	152.53	6.33	9.66
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	35.05	0.00	35.05	35.05	15.00	5.26
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	14,162.20	177.30	14,339.50	14,250.85	0.00	757.46
Weighted Average Rate of Depreciation(%)					5.315192	



Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	ERSS XXIII				
Element Description	LILO of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400kV Line Bays at Saharsa-New (POWERGRID) sub-station				
Region	Eastern Region	DOC Date	Apr 28, 2022		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	0.00	0.00	0.00	365.00	366.00
No of days for which tariff claimed	0.00	0.00	0.00	338.00	366.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/ Project	0.00	0.00	0.00	33.00	33.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	0.00	0.00	0.00	0.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	0.00	0.00	33.00	33.00
Capital Base					
1.4 Opening capital cost	0.00	0.00	0.00	13,392.49	14,162.20
1.5 Additional Capital Expenditure dr. the year	0.00	0.00	0.00	769.71	177.30
1.6 De-Capitalisation During the year	0.00	0.00	0.00	0.00	0.00
1.7 Closing capital cost	0.00	0.00	0.00	14,162.20	14,339.50
1.8 Average capital cost	0.00	0.00	0.00	13,777.35	14,250.85
1.9 Freehold land included in 1.8	0.00	0.00	0.00	0.00	0.00
1.10 Asset having NIL salvage value included in 1.8	0.00	0.00	0.00	35.05	35.05
1.11 Asset having 10% salvage value included in 1.8	0.00	0.00	0.00	13,742.30	14,215.80
1.12 Depreciable Value(1.10+90% of 1.11)	0.00	0.00	0.00	12,403.12	12,829.28
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	0.00	0.00	0.00	4.923153	5.315192

1.14 Depreciation(for the period)	0.00	0.00	0.00	678.28	757.46
1.15 Depreciation(Annualised)	0.00	0.00	0.00	678.28	757.46
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	0.00	0.00	0.00	0.00	678.28
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	0.00	0.00	0.00	678.28	1,435.74



Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	LILO of both Circuits of Kishanganj (POWERGRID) -Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa-New (POWERGRID) sub-station alongwith associated 04 nos 400kV Line Bays at Saharsa-New (POWERGRID) sub-station		
Region	Eastern Region	DOC Date	Apr 28, 2022

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	0.00	0.00	0.00	365.00	366.00
No of days for which tariff claimed	0.00	0.00	0.00	338.00	366.00
O&M Expenses-one month	0.00	0.00	0.00	16.64	17.22
Maintenance spares 15% of O&M Expenses	0.00	0.00	0.00	29.96	31.00
Receivables equivalent to 45 days of AFC	0.00	0.00	0.00	286.99	292.97
Total Working capital	0.00	0.00	0.00	333.59	341.19
Bank Rate as on 01.04.2019 or as on 01st April of the COD year, whichever is later.	0.00	0.00	0.00	10.50	12.00
Interest on working capital	0.00	0.00	0.00	35.03	40.94
Pro rata interest on working capital	0.00	0.00	0.00	32.44	40.94



Combined Assets

Encl-5

Summary of Tariff

Form No. - 1

Name of the Transmission Licensee:	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Combined asset under ERSS-XXIII		
Region	Eastern Region	DOCO Date	Apr 14, 2022

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Year Days	365.00	365.00	365.00	366.00	365.00
Tariff Days	365.00	365.00	365.00	366.00	365.00
Depreciation-Form No. 10A	1,141.88	1,190.02	1,192.88	1,192.88	1,192.88
Interest on Loan-Form No. 9E	812.58	770.93	724.53	735.81	639.13
Return on Equity-Form No. 8	1,178.93	1,225.02	1,228.08	1,228.08	1,228.08
Int. on Working capital-Form No.11	61.57	63.14	63.35	64.23	63.87
Op. and maintenance-Form No.2	346.22	364.52	383.39	403.45	425.09
Total AFC	3,541.18	3,613.63	3,592.23	3,624.45	3,549.05



Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	ERSS XXIII		
Element Description	Combined asset under ERSS-XXIII		
Region	Eastern Region	DOCO Date	Apr 14, 2022

1. Transmission Lines

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/HVDC	S/C or D/C	No of Sub-Conductors	Voltage Level KV	Line Bays	Line Reactor (Including Switchable Reactor)	Line Length Km	Date of Commercial operation	Covered in the present petition	
									Yes/No	If No, Petition No.
BYPASSING OF 400 KV D/C FARAKKA-KAHALGAON (CKT-3 & CKT-4) AND 400 KV S/C FARAKKA-DURGAPUR (CKT-1 &	AC	DC	2	400 KV	0.000	0.000	3.190	Apr 14, 2022	Y	
220KV CABLE FROM ICT TO GIS BAY	AC	SC	1	220 KV	0.000	0.000	0.420	Apr 14, 2022	Y	
400KV D/C SAHARSA-DARBHANGA LOOP OUT LINE CKT 1&2	AC	DC	4	400 KV	0.000	0.000	20.720	Apr 14, 2022	Y	
400KV D/C SAHARSA-KISHANGANJ LOOP IN LINE CKT 1&2	AC	DC	4	400 KV	0.000	0.000	18.200	Apr 14, 2022	Y	

Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
SINGLE CIRCUIT (SINGLE CONDUCTOR)					



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Normative Rate of O&M as per Regulation		0.246	0.259	0.272	0.287	0.302
No. of Units - (Length in KM)		0.42	0.42	0.42	0.42	0.42
O&M Claimed		0.10	0.11	0.11	0.12	0.13

DOUBLE CIRCUIT (TWIN CONDUCTOR)

Normative Rate of O&M as per Regulation		0.861	0.906	0.953	1.003	1.056
No. of Units - (Length in KM)		3.19	3.19	3.19	3.19	3.19
O&M Claimed		2.75	2.89	3.04	3.20	3.37

DOUBLE CIRCUIT (BUNDLE CONDUCTOR WITH FOUR SUB-CONDUCTORS)

Normative Rate of O&M as per Regulation		1.291	1.359	1.43	1.506	1.585
No. of Units - (Length in KM)		38.92	38.92	38.92	38.92	38.92
O&M Claimed		50.25	52.89	55.66	58.61	61.69



2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transformers/ Reactor/ SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition Yes/No
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV		
Muzaffarpur:ICT4_ 400KV SIDE_MAIN_BAY_1_418		400 KV			1.000							Apr 14, 2022	Y
Muzaffarpur:ICT4_ TRANSFORMER_BAY_214		220 KV				1.000						Apr 14, 2022	Y
Muzaffarpur:ICT-IV AT MUZAFFARPUR		400 KV	1.000						500.00			Apr 14, 2022	Y
Er1 common:KISHANGANJ-III LINE BAY_419		400 KV			1.000							Apr 14, 2022	Y
Er1 common:KISHANGANJ-IV LINE BAY_422		400 KV			1.000							Apr 14, 2022	Y
Er1 common:DARBHANGA-I LINE BAY_421		400 KV			1.000							Apr 14, 2022	Y
Er1 common:DARBHANGA-I LINE BAY_424		400 KV			1.000							Apr 14, 2022	Y

Summary:

O&M Expenses For Substations Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
400KV SUB-STATION					



Normative Rate of O&M as per Regulation						
No. of Units		29.53	31.08	32.71	34.43	36.23
O&M Claimed		5.00	5.00	5.00	5.00	5.00
		147.65	155.40	163.55	172.15	181.15
400KV SUB-STATION ICT						
Normative Rate of O&M as per Regulation						
No. of Units		0.262	0.276	0.29	0.305	0.322
O&M Claimed		1.00	1.00	1.00	1.00	1.00
		131.00	138.00	145.00	152.50	161.00
220 kV GIS Substation						
Normative Rate of O&M as per Regulation						
No. of Units		14.469	15.225	16.03	16.87	17.752
O&M Claimed		1.00	1.00	1.00	1.00	1.00
		14.47	15.23	16.03	16.87	17.75



3. Communication System

Summary:

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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	53.10	55.89	58.81	61.93	65.19
Substation	293.12	308.63	324.58	341.52	359.90
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	346.22	364.52	383.39	403.45	425.09
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	346.22	364.52	383.39	403.45	425.09



Details of all the assets covered in the project

Form No. - 5B

Name of the Transmission Licensee		Power Grid Corporation of India Limited		
Project	ERSS XXIII			
Element Description	Combined asset under ERSS-XXIII			
Region	Eastern Region	DOCO Date	Apr 14, 2022	SCOD

(Amount in Rs. Lakh)



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Financial Package upto COD

Form No. - 6

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Combined asset under ERSS-XXIII		
Region	Eastern Region	DOCO Date	Apr 14, 2022

(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	0.00	INR	14,111.09		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	0.00	INR	6,047.81		0.00
Total Equity	INR	0.00	INR	6,047.81		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	0.00	INR	20,158.90		0.00

Particulars	Debt	Equity	Total
Addcap for 2024 - 2025			1,527.41
Addcap for 2025 - 2026			108.65
Addcap for 2026 - 2027			0.00
Addcap for 2027 - 2028			0.00



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Addcap for 2028 - 2029			0.00	
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Particulars	Actual	Normative	
Addcap for 2024 - 2025			
Equity		458.22	
Debt		1,069.19	
Total		1,527.41	
Addcap for 2025 - 2026			
Equity		32.59	
Debt		76.06	
Total		108.65	
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		21,794.96	



Statement of Additional Capitalisation after COD

Form No. - 7

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Combined asset under ERSS-XXIII		
Region	Eastern Region	DOCO Date	Apr 14, 2022

(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	495.27	0.00	0.00	0.00	0.00	0.00	0.00	495.27	0.00
Substations	930.45	0.00	0.00	0.00	0.00	0.00	0.00	930.45	0.00
Comm. Sys. excluding Fiber Optic	81.40	0.00	0.00	0.00	0.00	0.00	0.00	81.40	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	20.29	0.00	0.00	0.00	0.00	0.00	0.00	20.29	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	1,527.41	0.00	0.00	0.00	0.00	0.00	0.00	1,527.41	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	108.65	0.00	0.00	0.00	0.00	0.00	0.00	108.65	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	108.65	0.00	0.00	0.00	0.00	0.00	0.00	108.65	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/URTDMS/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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/URTDMS/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Financing of Additional Capitalisation

Form No. - 7A

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	ERSS XXIII		
Element Description	Combined asset under ERSS-XXIII		
Region	Eastern Region	DOCO Date	Apr 14, 2022

(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	1,069.19	76.06	0.00	0.00	0.00					
Equity	458.22	32.59	0.00	0.00	0.00					
Total	1,527.41	108.65	0.00	0.00	0.00					



Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Combined asset under ERSS-XXIII		
Region	Eastern Region	DOCO Date	Apr 14, 2022

(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	6,047.81	6,506.03	6,538.62	6,538.62	6,538.62
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)	6,047.81	6,506.03	6,538.62	6,538.62	6,538.62
Add: Increase in Equity due to addition during the year / period	458.22	32.59	0.00	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	0.00	0.00	0.00	0.00
Closing Normative Equity	6,506.03	6,538.62	6,538.62	6,538.62	6,538.62
Average Normative Equity	6,276.92	6,522.33	6,538.62	6,538.62	6,538.62
Rate of return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Reduced rate of 1% decided by commission under Regulation 30(2) (if any)	0.00	0.00	0.00	0.00	0.00
Effective rate of ROE	15.50	15.50	15.50	15.50	15.50
MAT/Corporate Rate	17.472	17.472	17.472	17.472	17.472
Grossed up rate of ROE	18.782	18.782	18.782	18.782	18.782
Return on Equity	1,178.93	1,225.02	1,228.08	1,228.08	1,228.08
Pro rata return on Equity	1,178.93	1,225.02	1,228.08	1,228.08	1,228.08

(Petitioner)

Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	ERSS XXIII				
Element Description	Combined asset under ERSS-XXIII				
Region	Eastern Region	DOCO Date	Apr 14, 2022		

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
SBI-04 -ADD CAP 2022-23					
Gross Loan- Opening	17.69	17.69	17.69	17.69	17.69
Cumulative repayments of Loans upto previous year	3.44	5.21	6.98	8.75	10.51
Net loan-Opening	14.25	12.48	10.71	8.94	7.18
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	1.77	1.77	1.77	1.77	1.77
Net Loan-Closing	12.48	10.71	8.94	7.17	5.41
Average Net Loan	13.37	11.60	9.83	8.06	6.30
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	1.0963	0.9512	0.8061	0.6609	0.5166

SBI-04 -ADD CAP LOAN					
Gross Loan- Opening	3.10	3.10	3.10	3.10	3.10
Cumulative repayments of Loans upto previous year	0.60	0.91	1.22	1.53	1.84
Net loan-Opening	2.50	2.19	1.88	1.57	1.26
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.31	0.31	0.31	0.31	0.31
Net Loan-Closing	2.19	1.88	1.57	1.26	0.95

Average Net Loan	2.35	2.04	1.73	1.42	1.11
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.1927	0.1673	0.1419	0.1164	0.091

SBI-04 -ADD CAP LOAN					
Gross Loan- Opening	5.18	5.18	5.18	5.18	5.18
Cumulative repayments of Loans upto previous year	1.01	1.53	2.04	2.56	3.08
Net loan-Opening	4.17	3.65	3.14	2.62	2.10
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.52	0.52	0.52	0.52	0.52
Net Loan-Closing	3.65	3.13	2.62	2.10	1.58
Average Net Loan	3.91	3.39	2.88	2.36	1.84
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.3206	0.278	0.2362	0.1935	0.1509

SBI-04 -ADD CAP LOAN					
Gross Loan- Opening	336.87	336.87	336.87	336.87	336.87
Cumulative repayments of Loans upto previous year	65.49	99.17	132.86	166.55	200.24
Net loan-Opening	271.38	237.70	204.01	170.32	136.63
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	33.69	33.69	33.69	33.69	33.69
Net Loan-Closing	237.69	204.01	170.32	136.63	102.94
Average Net Loan	254.54	220.86	187.17	153.48	119.79
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	20.8723	18.1105	15.3479	12.5854	9.8228

SBI-04 -ADD CAP LOAN					
Gross Loan- Opening	3.34	3.34	3.34	3.34	3.34
Cumulative repayments of Loans upto previous year	0.65	0.98	1.32	1.65	1.99
Net loan-Opening	2.69	2.36	2.02	1.69	1.35
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.33	0.33	0.33	0.33	0.33
Net Loan-Closing	2.36	2.03	1.69	1.36	1.02
Average Net Loan	2.53	2.20	1.86	1.53	1.19
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.2075	0.1804	0.1525	0.1255	0.0976

SBI-04 -ADD CAP LOAN					
Gross Loan- Opening	432.43	432.43	432.43	432.43	432.43
Cumulative repayments of Loans upto previous year	84.06	127.31	170.55	213.79	257.04
Net loan-Opening	348.37	305.12	261.88	218.64	175.39
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	43.24	43.24	43.24	43.24	43.24
Net Loan-Closing	305.13	261.88	218.64	175.40	132.15
Average Net Loan	326.75	283.50	240.26	197.02	153.77
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	26.7935	23.247	19.7013	16.1556	12.6091

SBI-04 -ADD CAP LOAN					
Gross Loan- Opening	18.52	18.52	18.52	18.52	18.52
Cumulative repayments of Loans upto previous year	3.60	5.45	7.30	9.16	11.01
Net loan-Opening	14.92	13.07	11.22	9.36	7.51



Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	1.85	1.85	1.85	1.85	1.85
Net Loan-Closing	13.07	11.22	9.37	7.51	5.66
Average Net Loan	14.00	12.15	10.30	8.44	6.59
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	1.148	0.9963	0.8446	0.6921	0.5404

HDFC (Rs.5000 Cr.) -ADDCAP(ACCRUAL IDC)

Gross Loan- Opening	0.03	0.03	0.03	0.03	0.03
Cumulative repayments of Loans upto previous year	0.02	0.02	0.02	0.02	0.02
Net loan-Opening	0.01	0.01	0.01	0.01	0.01
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.01	0.01	0.01	0.01	0.01
Average Net Loan	0.01	0.01	0.01	0.01	0.01
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	0.0008	0.0008	0.0008	0.0008	0.0008

HDFC (Rs.5000 Cr.) -ADDCAP(ACCRUAL IDC)

Gross Loan- Opening	0.23	0.23	0.23	0.23	0.23
Cumulative repayments of Loans upto previous year	0.12	0.12	0.12	0.13	0.14
Net loan-Opening	0.11	0.11	0.11	0.10	0.09
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.01	0.01	0.01
Net Loan-Closing	0.11	0.11	0.10	0.09	0.08
Average Net Loan	0.11	0.11	0.11	0.10	0.09



Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	0.0089	0.0089	0.0089	0.0081	0.0073

HDFC (Rs.5000 Cr.) -ADDCAP(ACCRUAL IDC)

Gross Loan- Opening	28.88	28.88	28.88	28.88	28.88
Cumulative repayments of Loans upto previous year	14.59	14.59	14.59	16.02	17.45
Net loan-Opening	14.29	14.29	14.29	12.86	11.43
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	1.43	1.43	1.43
Net Loan-Closing	14.29	14.29	12.86	11.43	10.00
Average Net Loan	14.29	14.29	13.58	12.15	10.72
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	1.1575	1.1575	1.10	0.9842	0.8683

HDFC (Rs.5000 Cr.) -DOCO FUNDING

Gross Loan- Opening	1,201.73	1,201.73	1,201.73	1,201.73	1,201.73
Cumulative repayments of Loans upto previous year	607.13	607.13	607.13	666.59	726.05
Net loan-Opening	594.60	594.60	594.60	535.14	475.68
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	59.46	59.46	59.46
Net Loan-Closing	594.60	594.60	535.14	475.68	416.22
Average Net Loan	594.60	594.60	564.87	505.41	445.95
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	48.1626	48.1626	45.7545	40.9382	36.122

HDEC (Rs.5000 Cr.) -DOCO FUNDING



Gross Loan- Opening	2,374.20	2,374.20	2,374.20	2,374.20	2,374.20
Cumulative repayments of Loans upto previous year	1,199.47	1,199.47	1,199.47	1,316.95	1,434.42
Net loan-Opening	1,174.73	1,174.73	1,174.73	1,057.25	939.78
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	117.47	117.47	117.47
Net Loan-Closing	1,174.73	1,174.73	1,057.26	939.78	822.31
Average Net Loan	1,174.73	1,174.73	1,116.00	998.52	881.05
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	95.1531	95.1531	90.396	80.8801	71.3651

HDFC (Rs.5000 Cr.) -DOCO FUNDING

Gross Loan- Opening	2,445.95	2,445.95	2,445.95	2,445.95	2,445.95
Cumulative repayments of Loans upto previous year	1,235.72	1,235.72	1,235.72	1,356.75	1,477.77
Net loan-Opening	1,210.23	1,210.23	1,210.23	1,089.20	968.18
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	121.02	121.02	121.02
Net Loan-Closing	1,210.23	1,210.23	1,089.21	968.18	847.16
Average Net Loan	1,210.23	1,210.23	1,149.72	1,028.69	907.67
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	98.0286	98.0286	93.1273	83.3239	73.5213

BOND LXIX (69) -ADD CAP LOAN

Gross Loan- Opening	8.32	8.32	8.32	8.32	8.32
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	8.32	8.32
Net loan-Opening	8.32	8.32	8.32	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	8.32	0.00	0.00
Net Loan-Closing	8.32	8.32	0.00	0.00	0.00
Average Net Loan	8.32	8.32	4.16	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	0.5034	0.5034	0.2517	0.00	0.00

BOND LXIX (69) -DOCO FUNDING

Gross Loan- Opening	144.64	144.64	144.64	144.64	144.64
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	144.64	144.64
Net loan-Opening	144.64	144.64	144.64	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	144.64	0.00	0.00
Net Loan-Closing	144.64	144.64	0.00	0.00	0.00
Average Net Loan	144.64	144.64	72.32	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	8.7507	8.7507	4.3754	0.00	0.00

BOND LXIX (69) -DOCO FUNDING

Gross Loan- Opening	7,340.56	7,340.56	7,340.56	7,340.56	7,340.56
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	7,340.56	7,340.56
Net loan-Opening	7,340.56	7,340.56	7,340.56	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	7,340.56	0.00	0.00
Net Loan-Closing	7,340.56	7,340.56	0.00	0.00	0.00
Average Net Loan	7,340.56	7,340.56	3,670.28	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	444.1039	444.1039	222.0519	0.00	0.00
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Canara-01 -ADD CAP 2022-23					
Gross Loan- Opening	29.28	29.28	29.28	29.28	29.28
Cumulative repayments of Loans upto previous year	2.93	4.39	7.32	10.25	13.18
Net loan-Opening	26.35	24.89	21.96	19.03	16.10
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	1.46	2.93	2.93	2.93	2.93
Net Loan-Closing	24.89	21.96	19.03	16.10	13.17
Average Net Loan	25.62	23.43	20.50	17.57	14.64
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	2.088	1.9095	1.6708	1.432	1.1932

Canara-01 -ADD CAP LOAN					
Gross Loan- Opening	100.98	100.98	100.98	100.98	100.98
Cumulative repayments of Loans upto previous year	10.10	15.15	25.25	35.34	45.44
Net loan-Opening	90.88	85.83	75.73	65.64	55.54
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	5.05	10.10	10.10	10.10	10.10
Net Loan-Closing	85.83	75.73	65.63	55.54	45.44
Average Net Loan	88.36	80.78	70.68	60.59	50.49
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	7.2013	6.5836	5.7604	4.9381	4.1149

Canara-01 -ADD CAP LOAN					
Gross Loan- Opening	106.37	106.37	106.37	106.37	106.37



Cumulative repayments of Loans upto previous year	10.64	15.96	26.59	37.23	47.87
Net loan-Opening	95.73	90.41	79.78	69.14	58.50
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	5.32	10.64	10.64	10.64	10.64
Net Loan-Closing	90.41	79.77	69.14	58.50	47.86
Average Net Loan	93.07	85.09	74.46	63.82	53.18
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	7.5852	6.9348	6.0685	5.2013	4.3342

BOND LXX (70) -ADD CAP LOAN

Gross Loan- Opening	2.00	2.00	2.00	2.00	2.00
Cumulative repayments of Loans upto previous year	0.20	0.40	0.60	0.80	1.00
Net loan-Opening	1.80	1.60	1.40	1.20	1.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.20	0.20	0.20	0.20	0.20
Net Loan-Closing	1.60	1.40	1.20	1.00	0.80
Average Net Loan	1.70	1.50	1.30	1.10	0.90
Rate of Interest on Loan on Annual Basis	7.40	7.40	7.40	7.40	7.40
Interest on loan	0.1258	0.111	0.0962	0.0814	0.0666

BOND LXXI (71) -ADD CAP LOAN

Gross Loan- Opening	10.90	10.90	10.90	10.90	10.90
Cumulative repayments of Loans upto previous year	0.82	1.91	3.00	4.09	5.18
Net loan-Opening	10.08	8.99	7.90	6.81	5.72
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	1.09	1.09	1.09	1.09	1.09



Net Loan-Closing	8.99	7.90	6.81	5.72	4.63
Average Net Loan	9.54	8.45	7.36	6.27	5.18
Rate of Interest on Loan on Annual Basis	7.52	7.52	7.52	7.52	7.52
Interest on loan	0.7174	0.6354	0.5535	0.4715	0.3895

BOND LXXII (72) -ADD CAP LOAN

Gross Loan- Opening	0.36	0.36	0.36	0.36	0.36
Cumulative repayments of Loans upto previous year	0.03	0.06	0.10	0.14	0.17
Net loan-Opening	0.33	0.30	0.26	0.22	0.19
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.04	0.04	0.04	0.04	0.04
Net Loan-Closing	0.29	0.26	0.22	0.18	0.15
Average Net Loan	0.31	0.28	0.24	0.20	0.17
Rate of Interest on Loan on Annual Basis	7.56	7.56	7.56	7.56	7.56
Interest on loan	0.0234	0.0212	0.0181	0.0151	0.0129

BOND LXXII (72) -ADD CAP LOAN

Gross Loan- Opening	50.29	50.29	50.29	50.29	50.29
Cumulative repayments of Loans upto previous year	3.77	8.80	13.83	18.86	23.89
Net loan-Opening	46.52	41.49	36.46	31.43	26.40
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	5.03	5.03	5.03	5.03	5.03
Net Loan-Closing	41.49	36.46	31.43	26.40	21.37
Average Net Loan	44.01	38.98	33.95	28.92	23.89
Rate of Interest on Loan on Annual Basis	7.56	7.56	7.56	7.56	7.56
Interest on loan	3.3272	2.9469	2.5666	2.1864	1.8061



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BOND LXXIII (73) -ADD CAP LOAN					
Gross Loan- Opening	8.05	8.05	8.05	8.05	8.05
Cumulative repayments of Loans upto previous year	0.00	0.81	1.61	2.42	3.22
Net loan-Opening	8.05	7.24	6.44	5.63	4.83
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.81	0.81	0.81	0.81	0.81
Net Loan-Closing	7.24	6.43	5.63	4.82	4.02
Average Net Loan	7.65	6.84	6.04	5.23	4.43
Rate of Interest on Loan on Annual Basis	7.50	7.50	7.50	7.50	7.50
Interest on loan	0.5738	0.513	0.453	0.3923	0.3323

BOND LXXIII (73) -ADD CAP LOAN					
Gross Loan- Opening	1.98	1.98	1.98	1.98	1.98
Cumulative repayments of Loans upto previous year	0.00	0.20	0.40	0.59	0.79
Net loan-Opening	1.98	1.78	1.58	1.39	1.19
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.20	0.20	0.20	0.20	0.20
Net Loan-Closing	1.78	1.58	1.38	1.19	0.99
Average Net Loan	1.88	1.68	1.48	1.29	1.09
Rate of Interest on Loan on Annual Basis	7.50	7.50	7.50	7.50	7.50
Interest on loan	0.141	0.126	0.111	0.0968	0.0818

BOND LXXIII (73) -ADD CAP LOAN					
Gross Loan- Opening	36.62	36.62	36.62	36.62	36.62
Cumulative repayments of Loans upto previous year	0.00	3.66	7.32	10.99	14.65



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Net loan-Opening	36.62	32.96	29.30	25.63	21.97
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	3.66	3.66	3.66	3.66	3.66
Net Loan-Closing	32.96	29.30	25.64	21.97	18.31
Average Net Loan	34.79	31.13	27.47	23.80	20.14
Rate of Interest on Loan on Annual Basis	7.50	7.50	7.50	7.50	7.50
Interest on loan	2.6093	2.3348	2.0603	1.785	1.5105

Bond LXXIV (74) -ADD CAP 2023-24

Gross Loan- Opening	11.11	11.11	11.11	11.11	11.11
Cumulative repayments of Loans upto previous year	0.00	1.11	2.22	3.33	4.44
Net loan-Opening	11.11	10.00	8.89	7.78	6.67
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	1.11	1.11	1.11	1.11	1.11
Net Loan-Closing	10.00	8.89	7.78	6.67	5.56
Average Net Loan	10.56	9.45	8.34	7.23	6.12
Rate of Interest on Loan on Annual Basis	7.70	7.70	7.70	7.70	7.70
Interest on loan	0.8131	0.7277	0.6422	0.5567	0.4712

Bond LXXIV (74) -ADD CAP LOAN

Gross Loan- Opening	0.68	0.68	0.68	0.68	0.68
Cumulative repayments of Loans upto previous year	0.00	0.07	0.14	0.20	0.27
Net loan-Opening	0.68	0.61	0.54	0.48	0.41
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.07	0.07	0.07	0.07	0.07
Net Loan-Closing	0.61	0.54	0.47	0.41	0.34



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Average Net Loan	0.65	0.58	0.51	0.45	0.38
Rate of Interest on Loan on Annual Basis	7.70	7.70	7.70	7.70	7.70
Interest on loan	0.0501	0.0447	0.0393	0.0347	0.0293

Bond LXXV (75) -ADD CAP LOAN

Gross Loan- Opening	2.00	2.00	2.00	2.00	2.00
Cumulative repayments of Loans upto previous year	0.00	0.20	0.40	0.60	0.80
Net loan-Opening	2.00	1.80	1.60	1.40	1.20
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.20	0.20	0.20	0.20	0.20
Net Loan-Closing	1.80	1.60	1.40	1.20	1.00
Average Net Loan	1.90	1.70	1.50	1.30	1.10
Rate of Interest on Loan on Annual Basis	7.65	7.65	7.65	7.65	7.65
Interest on loan	0.1454	0.1301	0.1148	0.0995	0.0842

Bond LXXV (75) -ADD CAP LOAN

Gross Loan- Opening	18.00	18.00	18.00	18.00	18.00
Cumulative repayments of Loans upto previous year	0.00	1.80	3.60	5.40	7.20
Net loan-Opening	18.00	16.20	14.40	12.60	10.80
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	1.80	1.80	1.80	1.80	1.80
Net Loan-Closing	16.20	14.40	12.60	10.80	9.00
Average Net Loan	17.10	15.30	13.50	11.70	9.90
Rate of Interest on Loan on Annual Basis	7.65	7.65	7.65	7.65	7.65
Interest on loan	1.3082	1.1705	1.0328	0.8951	0.7574



Summary

Gross Loan- Opening	14,740.29	14,740.29	14,740.29	14,740.29	14,740.29
Cumulative repayments of Loans upto previous year	3,244.39	3,352.13	3,471.70	11,384.21	11,803.18
Net loan-Opening	11,495.90	11,388.16	11,268.59	3,356.08	2,937.11
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	107.75	119.59	7,912.50	418.98	418.98
Net Loan-Closing	11,388.15	11,268.57	3,356.09	2,937.10	2,518.13
Average Net Loan	11,442.08	11,328.42	7,312.41	3,146.66	2,727.69
Rate of Interest on Loan on Annual Basis	6.7576	6.744	7.0494	8.0991	8.0983
Interest on loan	773.2096	763.9894	515.4845	254.8506	220.8973



Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Combined asset under ERSS-XXIII		
Region	Eastern Region	DOCO Date	Apr 14, 2022

(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	14,111.09	15,180.28	15,256.34	15,256.34	15,256.34
Cumulative repayments of Normative loan upto previous year	2,050.07	3,191.95	4,381.97	5,574.85	6,767.73
Net normative loan-Opening	12,061.02	11,988.33	10,874.37	9,681.49	8,488.61
Addition in normative loan towards the ACE	1,069.19	76.06	0.00	0.00	0.00
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	1,141.88	1,190.02	1,192.88	1,192.88	1,192.88
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	11,988.33	10,874.37	9,681.49	8,488.61	7,295.73
Average normative loan	12,024.68	11,431.35	10,277.93	9,085.05	7,892.17
Weighted Average Rate of interest on actual loan	6.7576	6.744	7.0494	8.0991	8.0983
Interest on normative loan	812.58	770.93	724.53	735.81	639.13
Pro rata interest on normative loan	812.58	770.93	724.53	735.81	639.13

(Petitioner)

Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Combined asset under ERSS-XXIII		
Region	Eastern Region	DOCO Date	Apr 14, 2022

(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	13,031.96	495.27	13,527.23	13,279.60	5.28	701.16
Sub Station	6,669.43	930.45	7,599.88	7,134.66	5.28	376.71
Comm. Sys. excluding Fiber Optic	281.44	81.40	362.84	322.14	15.00	48.32
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	35.05	20.29	55.34	45.20	15.00	6.78
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	140.81	0.00	140.81	140.81	6.33	8.91
TOTAL	20,158.69	1,527.41	21,686.10	20,922.41	0.00	1,141.88
Weighted Average Rate of Depreciation(%)					5.457689	

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



Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	13,527.23	108.65	13,635.88	13,581.56	5.28	717.11
Sub Station	7,599.88	0.00	7,599.88	7,599.88	5.28	401.27
Comm. Sys. excluding Fiber Optic	362.84	0.00	362.84	362.84	15.00	54.43
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	55.34	0.00	55.34	55.34	15.00	8.30
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	140.81	0.00	140.81	140.81	6.33	8.91
TOTAL	21,686.10	108.65	21,794.75	21,740.43	0.00	1,190.02
Weighted Average Rate of Depreciation(%)					5.473765	

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	13,635.88	0.00	13,635.88	13,635.88	5.28	719.97
Sub Station	7,599.88	0.00	7,599.88	7,599.88	5.28	401.27
Comm. Sys. excluding Fiber Optic	362.84	0.00	362.84	362.84	15.00	54.43
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	55.34	0.00	55.34	55.34	15.00	8.30
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	140.81	0.00	140.81	140.81	6.33	8.91
TOTAL	21,794.75	0.00	21,794.75	21,794.75	0.00	1,192.88
Weighted Average Rate of Depreciation(%)					5.473245	



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	13,635.88	0.00	13,635.88	13,635.88	5.28	719.97
Sub Station	7,599.88	0.00	7,599.88	7,599.88	5.28	401.27
Comm. Sys. excluding Fiber Optic	362.84	0.00	362.84	362.84	15.00	54.43
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	55.34	0.00	55.34	55.34	15.00	8.30
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	140.81	0.00	140.81	140.81	6.33	8.91
TOTAL	21,794.75	0.00	21,794.75	21,794.75	0.00	1,192.88
Weighted Average Rate of Depreciation(%)					5.473245	

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	13,635.88	0.00	13,635.88	13,635.88	5.28	719.97
Sub Station	7,599.88	0.00	7,599.88	7,599.88	5.28	401.27
Comm. Sys. excluding Fiber Optic	362.84	0.00	362.84	362.84	15.00	54.43
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	55.34	0.00	55.34	55.34	15.00	8.30
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	140.81	0.00	140.81	140.81	6.33	8.91
TOTAL	21,794.75	0.00	21,794.75	21,794.75	0.00	1,192.88

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Weighted Average Rate of Depreciation(%)					5.473245	
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Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Combined asset under ERSS-XXIII		
Region	Eastern Region	DOCO Date	Apr 14, 2022

(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	31.00	31.00	31.00	31.00	31.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	1.00	2.00	3.00	4.00	5.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	30.00	29.00	28.00	27.00	26.00
Capital Base					
1.4 Opening capital cost	20,158.69	21,686.10	21,794.75	21,794.75	21,794.75
1.5 Additional Capital Expenditure dr. the year	1,527.41	108.65	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	21,686.10	21,794.75	21,794.75	21,794.75	21,794.75
1.8 Average capital cost	20,922.41	21,740.43	21,794.75	21,794.75	21,794.75
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	45.20	55.34	55.34	55.34	55.34
1.11 Asset having 10% salvage value included in 1.8	20,877.21	21,685.09	21,739.41	21,739.41	21,739.41
1.12 Depreciable Value(1.10+90% of 1.11)	18,834.69	19,571.92	19,620.81	19,620.81	19,620.81
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	5.457689	5.473765	5.473245	5.473245	5.473245



1.14 Depreciation(for the period)	1,141.88	1,190.02	1,192.88	1,192.88	1,192.88
1.15 Depreciation(Annualised)	1,141.88	1,190.02	1,192.88	1,192.88	1,192.88
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	2,050.07	3,191.95	4,381.97	5,574.85	6,767.73
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	3,191.95	4,381.97	5,574.85	6,767.73	7,960.61


 (Petitioner)

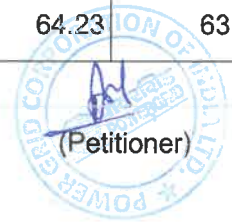
Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ERSS XXIII		
Element Description	Combined asset under ERSS-XXIII		
Region	Eastern Region	DOCO Date	Apr 14, 2022

(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	28.85	30.38	31.95	33.62	35.42
Maintenance spares 15% of O&M Expenses	51.93	54.68	57.51	60.52	63.76
Receivables equivalent to 45 days of AFC	436.58	445.52	442.88	445.63	437.55
Total Working capital	517.36	530.58	532.34	539.77	536.73
Bank Rate as on 01.04.2024 or as on 01st April of the COD year, whichever is later.	11.90	11.90	11.90	11.90	11.90
Interest on working capital	61.57	63.14	63.35	64.23	63.87
Pro rata interest on working capital	61.57	63.14	63.35	64.23	63.87



Summary of issue involved in the petition		PART-III FORM- 15
1. Name of the Petitioner		Powergrid Corporation of India Ltd
2. Petition Category		Transmission
3. Tariff Period		2019-24 & 2024-29
4. Name of the Project		Assets under "Eastern Region Strengthening Scheme-XXIII" in the Eastern Region in Eastern Region
5. Investment Approval date		NA
6. SCOD of the Project		NA
7. Actual COD of the project		ECOD: 14.04.2022
8. Whether entire scope is covered in the present petition.		YES
9. No. of Assets covered in instant petition		03 Nos
10. No. of Assets having time over run		NA
11. Estimated Project Cost as per IA		Rs. 23989.21 lakhs
12. Is there any REC? if so, provide the date		NA
13. Revised Estimated Project Cost (if any)		Rs. 23176.78 lakhs
14. Completion cost for all the assets covered in the instant petition.		Rs. 21794.75 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 BIHAR STATE POWER (HOLDING) COMPANY LIMITED
- 2 WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED
- 3 GRID CORPORATION OF ORISSA LTD.
- 4 DAMODAR VALLEY CORPORATION
- 5 POWER DEPARTMENT
- 6 JHARKHAND BIJLI VITRAN NIGAM LTD.
7. NATIONAL THERMAL POWER CORPORATION LIMITED (NTPC),



Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL the assets covered in the present petition.			
Name of the Petitioner		Powergrid Corporation of India Ltd	
Tariff Period		2019-24	
Name of the Transmission Project		Assets under "Eastern Region Strengthening Scheme-XXIII" in the Eastern Region in Eastern Region	
COD of the Project (if entire scope of project is completed)			
			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.												
S. No.	Asset No.	COD	i) Apportioned Approved Cost				ii) Summary of Actual / Projected Capital Cost					
			As per Investment approval	As per RCE	As on COD	2019-20	2020-21	2021-22	2022-23	2023-24	Capital Cost as on 31.03.2024	
		1	3	4	5	6	7	8	9	10	(5+6+7 +8+9+10	
1	Asset-1	02.01.2022	2434.45	2296.63	1622.39	--	--	84.87	71.82	46.24	1825.32	
2	Asset-2	08.04.2022	3176.42	4400.95	3338.97			0	628.36	26.54	3993.87	
3	Asset-3	28.04.2022	18378.34	16479.2	13392.49			0	769.71	177.3	14339.50	
Total Capital Cost Claimed			23989.21	23176.78	18353.85	0.00	0.00	84.87	1469.89	250.08	20158.69	

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	2019-20	2020-21	2021-22	2022-23	2023-24
1	Asset-1	Bypassing of 400 kV D/C Farakka - Kahalgaon (Ckt-3 & Ckt-4) and 400 kV S/C Farakka - Durgapur (Ckt-1 & Ckt-2) existing Transmission Line from NTPC, Farakka so as to form 400 kV	0.00	0.00	63.31	284	295.62
2	Asset-2	01 no. 500 MVA, 400/220 kV Transformer (4th ICT) along with 01 no. 400 kV ICT bay (AIS) & 01 No. 220 kV ICT bay (GIS) along with 220 kV Cable from ICT to GIS bay at Muzaffarpur	0.00	0.00	0.00	829.62	913.51
3	Asset-3	LILO of both Circuits of Kishanganj (POWERGRID) - Darbhanga (DMTCL) 400 kV D/C (Quad) Line at Saharsa New (POWERGRID) sub-station along with associated 04 nos 400kV Line Bays at	0.00	0.00	0.00	2,155.63	2,382.78
Total AFC for all the Assets			0.00	0.00	63.31	3269.25	3591.91

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



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Stamp of the Corporation of India Ltd. (Petitioner)

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

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PART-III

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

Form No.	Title of Tariff Filing Forms (Transmission& Communication System)	Tick
FORM- 1	Summary of Tariff	✓
FORM- 1A	Summary of Asset level cost	NA
FORM-2	Details of Transmission Lines and Substations and Communication System covered in the project scope and O&M for instant asset	✓
FORM-3	Normative parameters considered for tariff computations	✓
FORM- 4	Abstract of existing transmission assets/elements under project, Determination of Effective COD and Weighted Average Life for single AFC for the project as whole.	NA
FORM- 4A	Statement of Capital cost	NA
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	NA
FORM- 7	Statement of Additional Capitalisation after COD	NA
FORM- 7A	Financing of Additional Capitalisation	NA
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	✓
FORM-9E	Calculation of Interest on Normative Loan	✓
FORM- 10	Calculation of Depreciation Rate on original project cost	✓
FORM- 10A	Statement of Depreciation	✓
FORM- 10B	Statement of De-capitalisation	NA
FORM- 11	Calculation of Interest on Working Capital	✓
FORM- 12	Details of time over run	NA
FORM- 12A	Incidental Expenditure during Construction	NA
FORM- 12B	Calculation of IDC & Financing Charges	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.	NA
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	NA
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.		

