

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

Petition No. \_\_\_/TT/ \_\_\_

**IN THE MATTER OF: -**

**Subject matter:** Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for **Assets under “Baharampur (POWERGRID) – Bheramara (BANGLADESH) 02ND 400 kV D/C transmission line (INDIAN PORTION)” in Eastern Region** under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

**Power Grid Corporation of India Ltd.**

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.  
The Republic Of India

---PETITIONER

**Bangladesh Power Development Board (BPDB)**

WAPA Building,  
MotiJheel Commercial Area,  
Dhaka – 1000,  
People’s Republic of Bangladesh

---RESPONDENT

**Place: Gurgaon**

**Petitioner**

**Date:** 09.10.2024



**(Zafrul Hasan)**

**General Manager (Commercial)**



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**And others**

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

**GURGAON**

**DATED: 03.10.2024**

**REPRESENTED BY**



**(Zafrul Hasan)**

**General Manager (Commercial)**



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---RESPONDENT

WAPA Building,  
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To  
The Secretary  
Central Electricity Regulatory Commission  
New Delhi 110001

Sir,

The present tariff Petition is filed under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity



Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024 and same may be pleased to be registered and taken on record by the Hon'ble Commission.

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

**GURGAON**

**DATED: 03.10.2024**

**REPRESENTED BY**



**(Zafrul Hasan)**

**General Manager (Commercial)**



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

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**IN THE MATTER OF:**

**Subject matter:** Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for **Assets under “Baharampur (POWERGRID) – Bheramara (BANGLADESH) 02ND 400 kV D/C transmission line (INDIAN PORTION)” in Eastern Region** under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

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**MEMO OF PARTIES**

**Power Grid Corporation of India Ltd.**

--- PETITIONER

VERSUS

**Eastern Region**

--- RESPONDENTS



- Bangladesh Power Development Board (BPDB)**  
WAPA Building,  
MotiJheel Commercial Area,  
Dhaka – 1000,  
People's Republic of Bangladesh

**GURGAON**

**DATED: 01.10.2024**

**PETITIONER**  
**POWER GRID CORPORATION OF INDIA LTD.**

**REPRESENTED BY**



**Zafrul Hasan**  
**General Manager (Commercial)**



**BEFORE**  
**THE CENTRAL ELECTRICITY REGULATORY COMMISSION**  
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**MEMO OF APPEARANCE**

**POWER GRID CORPORATION OF INDIA LTD.**

-- PETITIONER

1. Shri Dilip Nagesh Rozekar, ED (Commercial & Regulatory Cell), POWERGRID
2. Shri Mohd. Mohsin, Chief GM (Commercial & Regulatory Cell), POWERGRID
3. Shri V.C. Sekhar, Sr. GM (Regulatory Cell)
4. **Shri Zafrul Hasan, GM (Commercial), POWERGRID**
5. Smt. Suchitra Rani Gautam, DGM (Commercial)
6. Shri. Arjun Malhotra, Manager (Law-Commercial)





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

IN WITNESS WHEREOF I have set and subscribed my hands to this writing on this 03<sup>rd</sup> date of Oct'2024.

**PETITIONER**  
**POWER GRID CORPORATION OF INDIA LTD.**

**GURGAON**

**DATED: 03.10.2024**

  
**Zafrul Hasan**  
**General Manager (Commercial)**



**BEFORE  
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**Bangladesh Power Development Board (BPDB)**

**---RESPONDENT**

WAPA Building,  
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Dhaka – 1000,  
People’s Republic of Bangladesh

**A. EXECUTIVE SUMMARY OF THE PETITION:**

**(i) Brief Background of the Petitioner**

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



licensee is required to inter-alia build, maintain and operate an efficient, coordinated and economical interstate transmission system (“ISTS”). POWERGRID operates and functions within the regulatory control of this Hon’ble Central Electricity Regulatory Commission (hereinafter referred to as “Hon’ble Central Commission”). Tariff for the transmission system established by POWERGRID is required to be determined by this Hon’ble Central Commission in accordance with the Tariff Regulations as notified by this Hon’ble Central Commission in exercise of its powers under Section 178 of the Electricity Act, 2003.

**(ii) Brief Background of the Respondent(s):**

POWERGRID has impleaded BPDB {BPDB: Bangladesh Power Development Board} as per the Clause 3.0 of the BPTA dated 28.2.2018 signed between the Petitioner and BPDB stipulates that transmission charges shall be paid to the Petitioner by BPDB. Therefore, the billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the BPTA signed between BPDB and the Petitioner. The transmission charges shall be paid by BPDB as per the provisions of Clause 3.0 of the BPTA and the same shall not be considered under the Common pool. The transmission asset shall be considered at zero cost in ISTS network.

**(iii) Background of Transmission Assets:**

- POWERGRID has filed the present petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for the following Assets which are under “Baharampur (POWERGRID) – Bheramara (BANGLADESH) 02ND 400 kV D/C transmission line (INDIAN PORTION)” for the following:

Asset Name	DOCO (COD – approved)	Remarks
400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line {INDIAN PORTION} bays at Baharampur sub-station	27.07.2020	Herein referred as Asset-I

*Entire scope of subject project is captured in the above table.*



**(iv) Summary of Claims:**

3. A. POWERGRID is seeking truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for aforesaid transmission assets on capital cost comprising of capital cost incurred/Admitted upto 31.03.2019/DOC0 and additional capital expenditure during 2019-24 & 2024-29 in accordance with terms of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (“**Tariff Regulations, 2019**”) and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 (“**Tariff Regulations, 2024**”).
4. The details of FR (Feasibility Report) /RCE (Revised Cost Estimate) approved cost vis-à-vis claimed capital cost as on 31.03.2019 and additional capital expenditure during 2019-24 and 2024-29 tariff block is as under:

**TARIFF BLOCK 2019-24:**

₹ in Lakhs								
Asset No	Apportioned approved cost as per FR	Capital cost as on COD	Additional Capitalization (2019-24)					Capital Cost as on 31.03.2024
			19-20	20-21	21-22	22-23	23-24	
I	19849.00	15492.73	-	223.52	805.94	229.15	86.31	16837.65

**TARIFF BLOCK 2024-29:**

₹ in Lakhs								
Asset No	Apportioned approved cost as per FR	Capital cost as on 31.03.2024	Additional Capitalization (2024-29)					Capital Cost as on 31.03.2029
			24-25	25-26	26-27	27-28	28-29	
I	19849.00	16837.65	24.16	0.00	0.00	0.00	0.00	16861.81



5. Details of tariff claimed are as under:

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

Tariff For 2019-24 Block						
						₹ in Lakhs
Asset No	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-I	Approved Tariff (approved vide CERC order 07/TT/2022)	-	1413.79	2138.27	2163.80	2158.40
	Revised tariff (claimed vide instant petition)	-	1408.95	2145.75	2249.04	2368.39

Tariff For 2024-29 Block					
					₹ in Lakhs
Asset No	2024-25	2025-26	2026-27	2027-28	2028-29
Asset-I	2337.16	2299.05	2266.41	2230.88	2201.08

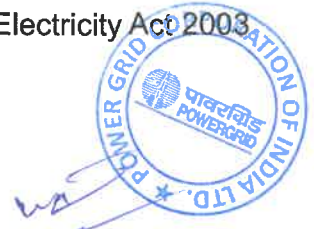
6. It is prayed to hon'ble commission to take on record the instant petition and approve the capital cost claimed for tariff determination and further prayed to reimburse expenditure of petition filing fee, license fee, newspaper publication expanses and RLDC fee & charges etc.

**B. DETAILED PETITION:**

**MOST RESPECTFULLY SHOWETH:**

**Issue wise submission(s):**

7. The Petitioner herein, Power Grid Corporation of India Ltd/ POWERGRID. is a Government Company within the meaning of the Companies Act, 1956. POWERGRID is a deemed transmission licensee under Section 14 of the Electricity Act 2003



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

Asset No	Asset Name	DOCO (Approved)	Remarks
Asset-I	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line {INDIAN PORTION} bays at Baharampur sub-station*	27.07.2020	Covered under instant petition  (Earlier covered under Petition no. 07/TT/2022)

\*Bangladesh (BPDB) portion: Completed & Charged (Power Flow) on 15.06.2021 (Ckt-III) and 27.10.2021 (Ckt.-IV)

**COST DETAILS:**

**TARIFF BLOCK 2019-24:**

10. The details of admitted cost for the assets covered in instant petition as per Hon'ble Commission order dated 12.04.2023 in petition no. 07/TT/2022 (Encl-1) for 2019-24 tariff block is given hereunder:

Asset No	Apportioned approved cost as per FR	Capital cost admitted as on COD	Additional Capitalization allowed (2019-24)					Capital Cost allowed as on 31.03.2024
			19-20	20-21	21-22	22-23	23-24	
			₹ in Lakhs					
I	19849.00	15341.09*	557.91^	527.23^	-	-	-	16426.23



Remarks, if any: -

\*: Excludes:

- (i) disallowed IDC due to time overrun (not-condoned) amounting to Rs. 20.59 Lakhs
- (ii) disallowed IEDC due to time overrun (not-condoned) amounting to Rs. 47.03 Lakhs
- (iii) disallowed excess initial spares amounting to Rs. 219.95 Lakhs
- (iv) IDC un-discharged as on COD amounting to Rs. 7.62 Lakhs

^Includes:

- (i) IDC discharged after COD amounting to Rs. 5.39 lakhs (in FY 2020-21) and Rs. 2.23 Lakhs (in FY 2021-22)

### INITIAL SPARES:

11. It is submitted that the Initial spares claimed under subject project are within permissible limit for Sub-station head, however, for the T/L head, the initial spares are in excess.

The details of Initial Spares, computed are as under:

₹ in Lakhs					
Asset	Plant & machinery cost for calculation of initial spares (₹ in lakh) (A)	Initial Spares claimed (₹ in lakh) (B)	Norms as per the 2014-19 Tariff Regulations (%)	Initial Spares worked out as per norms (₹ in lakh) {C= (A-B)x2.50 / (100-2.50)}	Surplus/ Excess initial spares (₹ in lakh) D= (C-B)
<b>For Transmission Line</b>					
I	13396.73	350.02	1.00	131.78	131.78 (excess)
<b>For Sub-station</b>					
I	2657.39	99.31	6.00	163.28	63.97 (surplus)

As per calculation tabulated above, on project level, the initial spares claimed under TL head are in excess of permissible limit as compared to initial spares worked out by an amount of Rs. 218.24 lakhs and the same has been deducted from capital cost for the purpose of tariff determination.



12. Based on Audited cost certificates dated 11.09.2024 (Encl-2), the details of capital cost as under:

								₹ in Lakhs
Asset No	Apportioned approved cost as per FR	Capital cost as on COD	Additional Capitalization (2019-24)					Capital Cost as on 31.03.2024
			19-20	20-21	21-22	22-23	23-24	
I	19849.00	15779.35	-	222.76	805.94	229.15	86.31	17123.51*
<p>Remarks, if any: -            *cost upto 31.03.2024 is Rs. 17123.51 Lakhs, however, total completion cost as per Audited certificate is Rs. 17417.67 lakhs (incl. add-cap of Rs. 24.16 lakhs for FY 2024-25)</p>								

13. Now, the capital cost being claimed, for tariff period 2019-24, alongwith comparison with admitted / approved cost as per Hon'ble Commission order dated 12.04.2023 in petition no. 07/TT/2022 is hereunder:

Asset-I								₹ in Lakhs
Asset No	Apportioned approved cost as per RCE	Capital cost considered as on COD	Additional Capitalization (2019-24)					Capital Cost as on 31.03.2024
			19-20	20-21	21-22	22-23	23-24	
As approved vide CERC order no. 07/TT/2022 dated 12.04.2023 (A)								
I	19849.00	15341.09	-	557.91	527.23	0.00	0.00	16426.23
As claimed in instant petition (B)								
I	19849.00	15492.73	-	223.52	805.94	229.15	86.31	16837.65
Variation (B-A)								
I	-	151.64*	-	-334.39	278.71	229.15	86.31	411.42
<p>Remarks, if any: -            *Increase in FERV component (amounting to Rs. 143.06 lakhs) leading to increase in COD cost.            Add-cap after cut-off date (31.07.2023) against Liability payment under S/S head.</p>								





DOCO Cost Variation (Increase) Justification:

It is submitted that there is an increase in COD cost claimed as per latest Audited cost certificate i.e. Rs. 15779.35 lakhs vis-à-vis the COD cost as per previous Management signed certificates (submitted in petition no. 07/TT/2022) i.e. Rs. 15636.29 lakhs.

It is submitted that the above increase of Rs. 143.06 lakhs is on account of increase in FERV (Foreign Exchange Rate Variation). The Petition no. 07/TT/2022 was filed on the basis of proposed DOCO (i.e., DOCO of the instant asset was involved under Regulation 5(2) of 2019 Tariff Regulations). While preparing the management certificate submitted with the petition, inadvertently exchange rate as on 30/09/2020 was considered instead of exchange rate as on 27/07/2020.

In this respect, it is important to note that exchange rate as on 27/07/2020 was higher than the exchange rate as on 30/09/2020. The Hon'ble Commission is requested to kindly consider the revised DOCO cost as per the auditor certificate submitted along with the instant petition.

Cost Variation justification:

It is submitted that the Add - Cap approved by the Hon'ble Commission vide order dated 12.04.2023 in petition no. 07/TT/2022 were based on projections. In this regard it may be noted that while projecting the estimated add cap, contracts are not closed and liabilities does not get finalized. However, in the instant true up petition, add cap is claimed on the basis of actual payments made to the contractor after receipt of final invoices from the contractor and incorporating the amendments. It is also submitted that the actual capital expenditure incurred by the petitioner after closing of contract may happen to be higher or lower than the estimated add cap prepared and submitted.

It is further submitted that the payments were made after submission of the invoice and after reconciliation in accordance with the contractual clause as per provisions of contract. Further, Liability flow statement for instant Asset is enclosed at **Encl-2**



**TARIFF BLOCK 2024-29:**

14. The capital cost claimed for tariff block 2024-29 for the instant assets is as hereunder:

₹ in Lakhs								
Asset No	Apportioned approved cost as per FR	Capital cost as on 31.03.2024	Additional Capitalization (2024-29)					Capital Cost as on 31.03.2029
			24-25	25-26	26-27	27-28	28-29	
I	19849.00	16837.65	24.16	0.00	0.00	0.00	0.00	16861.81
<p><i>Remarks, if any: -</i>  <i>Add-cap after cut-off date (31.07.2023) against Liability payment under S/S head.</i></p>								

**ADDITIONAL CAPITALIZATION DETAILS:**

15. The additional capitalization details are as hereunder:

The cut-off date(s) for the instant Asset is as tabulated below:

Asset No.	DOCO date	Cutoff date
Asset-I	27.07.2020	31.07.2023

The Additional capitalization is being claimed as per following mentioned relevant Regulation(s):

ADD-CAP FOR TARIFF BLOCK 2019-24 and 2024-29:

₹ in Lakhs											
Particulars		Additional Capitalization Claimed (2019-24)					Additional Capitalization Claimed (2024-29)				
Asset / FY		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
(i)	Add-cap	0.00	223.52*	805.94	229.15	86.31	24.16	0.00	0.00	0.00	0.00
	Reg.	-	24(1)(a)	24(1)(a)	24(1)(a), 25(1)(d)	25(1)(d)	25(1)(d)	-	-	-	-
*Includes IDC discharge of Rs. 0.76 lakhs in FY 2020-21											



I	T	0.00	223.52	805.94	229.15	86.31	24.16	0.00	0.00	0.00	0.00

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

Further, it is also submitted that the add cap approved by the Commission during 2019-24 tariff block were based on projections. In this regard, it may be noted that while projecting the estimated add cap, contracts were not closed and liabilities were not finalized. However, in the instant true up petition, add cap is claimed on the basis of actual payments made to the contractor after receipt of final invoices from the contractor and incorporating the amendments till the end of Tariff block 2019-24.

The additional capital expenditure claimed in the 2019-24 & 2024-29 period is on account of undischarged liability towards final payment/withheld payment due to contractual exigencies and for works executed prior to the cut-off date. A liability flow statement having Package/ Contractor wise detail is enclosed at Encl-2.

16. The cost details as worked out for the purpose of computation of Truing-Up tariff for period 2019-24 and Transmission tariff for the period 2024-29 for the instant assets is detailed hereunder as:

Asset-I					
₹ in Lakhs					
Expenditure	TL	Sub-station	PLCC	IT	Total
Cost upto COD (27.07.2020) As per Audited Certificate	14193.16	1274.30	211.71	100.18	15779.35
Less: IDC discharged after COD in FY 2020-21 & 2021-22	19.20	1.72	0.29	0.14	21.35
<i>Total IDC deducted due to time overrun Rs. 20.59 lakhs (adjusted with IDC discharge after COD in FY 2020-21 &amp; FY 2021-22)</i>			-		
Less: IEDC deducted due to time overrun	42.30	3.80	0.63	0.30	47.03
Less: excess initial spares (TL) beyond permissible limit	218.24	0.00	0.00	0.00	218.24
<b>Expenditure considered upto COD</b>	<b>13913.42</b>	<b>1268.78</b>	<b>210.79</b>	<b>99.75</b>	<b>15492.73</b>



Expenditure for FY 2020-21 (As per auditor certificate)	95.74	127.04	0.00	0.00	222.76
Add: IDC discharged after COD in FY 2020-21	12.90	1.16	0.19	0.09	14.34
Less: adjustment of IDC deducted due to time overrun	12.21	1.10	0.18	0.09	13.58
Add: Net IDC discharged after COD in FY 2020-21 (after adjustment)	0.69	0.06	0.01	0.00	0.76
Expenditure considered for FY 2020-21	96.40	127.10	0.01	0.00	223.52
Expenditure for FY 2021-22 (As per auditor certificate)	57.44	748.50	0.00	0.00	805.94
Add: IDC discharged after COD in FY 2021-22	6.31	0.57	0.09	0.04	7.01
Less: adjustment of IDC deducted due to time overrun	6.31	0.57	0.09	0.04	7.01
Add: Net IDC discharged after COD in FY 2021-22 (after adjustment)	0.00	0.00	0.00	0.00	0.00
Expenditure considered for FY 2021-22	57.44	748.50	0.00	0.00	805.94
Expenditure for FY 2022-23 (As per auditor certificate)	24.05	205.10	0.00	0.00	229.15
Expenditure for FY 2023-24 (As per auditor certificate)	0.00	86.31	0.00	0.00	86.31
<b>Total Completion Cost considered upto 31.03.2024</b>	<b>14091.31</b>	<b>2435.79</b>	<b>210.80</b>	<b>99.75</b>	<b>16837.65</b>
Est. Expenditure for 2024-25 (As per auditor certificate)	0.00	24.16	0.00	0.00	24.16
Est. Expenditure for 2025-29 (As per auditor certificate)	0.00	0.00	0.00	0.00	0.00
<b>Total Completion Cost considered upto 31.03.2029</b>	<b>14091.31</b>	<b>2459.95</b>	<b>210.80</b>	<b>99.75</b>	<b>16861.81</b>
<i>Total completion cost (As per Audited Certificate)</i>	<i>14370.37</i>	<i>2465.41</i>	<i>211.71</i>	<i>100.18</i>	<i>17147.67</i>

**Note:**

- (i) Total IDC discharge After COD is Rs. 21.35 lakhs (discharge in FY 2020-21 of Rs. 14.34 lakhs & in FY 2021-22 of Rs. 7.01 lakhs).
- (ii) Total IDC deducted due to time overrun is Rs. 20.59 lakhs (i.e. Rs. 13.58 lakhs + Rs. 7.01 lakhs, adjusted with IDC discharge in FY 2020-21 & FY 2021-22 lakhs to arrive at COD cost considered for tariff purpose).
- (iii) Total IEDC Deduction due to time overrun is Rs. 47.03 lakhs.
- (iv) Excess Initial spares deducted from Cod cost of Rs. 218.24 lakhs (TL).



**COD:**

17. The instant Asset-I is a single asset for Cod was approved by The Hon'ble Commission as 27.07.2020 vide their tariff order dated 12.04.2023 in petition no. 07/TT/2022.
18. It is submitted that for the instant asset, Accrued IDC as on DOCO was not considered while calculating the tariff as the same was undercharged up to DOCO. The accrued IDC has been taken out of DOCO expenditure and added in the add cap, when it has been discharged in case of all assets covered under the instant petition. The Hon'ble Commission is requested to kindly allow IDC on the basis of cash outflow.
19. **Debt: Equity Ratio:** The actual debt equity ratio deployed in instant asset is 70:30 for expenditure upto DOCO and all add-cap expenditures. Loan drawls as per actual expenditure have been depicted in Form-9C while Form-9E is as per cost claimed for tariff as mentioned at para-16 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.

**TRANSMISSION TARIFF:**

20. **Transmission tariff:**

The 2019-2024 truing up exercise is to be done at the time of filing tariff petition for next block, i.e. 2024-29 period as per regulation 13 of Tariff Regulation 2019-24.

Regulation 13 of Tariff Regulation 2019-24:

**Quote**

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

**Unquote**

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



Regulation 31 (3) of the tariff Regulation 2019-24:

**Quote**

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

**Unquote**

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

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

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



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

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

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

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

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



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

Truing-Up Tariff For 2019-24 Block						
						₹ in Lakhs
Asset No	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-I	Approved Tariff (approved vide CERC order 07/TT/2022)	-	1413.79	2138.27	2163.80	2158.40
	Revised tariff (claimed vide instant petition)	-	1408.95	2145.75	2249.04	2368.39

Tariff Filing Formats along with the other relevant information and supporting documentation are attached hereto as **Encl-3**.

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.

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

Tariff For 2024-29 Block					
					₹ in Lakhs
Asset No	2024-25	2025-26	2026-27	2027-28	2028-29
Asset-I	2337.16	2299.05	2266.41	2230.88	2201.08

Tariff Filing Formats along with the other relevant information and supporting documentation are attached hereto as **Encl-4**.





23. The asset-I shall complete 12 years of useful life after Tariff block 2024-29 and thus depreciation till that year 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.
24. 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.
25. 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 21 & 22 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.



26. In the tariff calculation for 2019-24 period, Interest on Loan has been calculated on the basis of actual rate of interest of various loans deployed for each year. In the tariff calculation for 2024-29 period, Interest on Loan has been calculated on the basis of interest rates prevailing as on 01.04.2024 for respective loans. The change in Interest rate due to floating rate of interest applicable, if any, for the project needs to be claimed / adjusted over the tariff block of 05 years directly from / with the beneficiaries.
- For the purpose of the supporting documents for rate of interest, a compendium of floating rate of interest of various loans during the tariff period 2019-24 shall be submitted shortly before the Hon'ble Commission.
27. The transmission charges at para 21 & 22 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.
28. That as per Regulation 36(3)(d) of CERC Tariff Regulations, 2024, the Security Expenses, Insurance and Capital Spares more than Rs. 10 Lakh for transmission system shall be allowed separately after prudence check.

**SECURITY EXPANSES:**

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

**INSURANCE:**

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



**CAPITAL SPARE:**

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

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

29. That as per Regulation 99 of CERC Tariff Regulations, 2024, the fees and charges of Central Transmission Utility of India Limited ('CTUIL') shall be allowed separately by the Commission through a separate regulation. Further, it provides that that until such regulation is issued by the Commission, the expenses of CTUIL shall be borne by POWERGRID which shall be recovered by POWERGRID as additional O&M expenses through a separate petition.

Accordingly, the expenses of CTUIL borne by POWERGRID shall be claimed through a separate petition.

30. The application filing fee, expenses incurred on publication of Notices in Newspapers and License fee may be allowed to be recovered separately from the respondents in terms of Regulation 94(1) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024. The fees and charges to be paid by the petitioner as ISTS licensee (deemed ISTS licensee) under CERC (Fees and Charges of RLDC and other matters) Regulations as amended from time to time shall also be recoverable from the DICs as provided under clause 94 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

31. The Transmission Charges and other related Charges indicated at para 21 & 22 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.

**SHARING OF TRANSMISSION CHARGES:**

32. The Clause 3.0 of the BPTA dated 28.02.2018 signed between the Petitioner and BPDB stipulates that transmission charges shall be paid to the Petitioner by BPDB. Therefore, the billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the BPTA signed between BPDB and the Petitioner. The transmission charges shall be paid by BPDB as per the provisions of Clause 3.0 of the BPTA and the same shall not be considered under the Common pool. The transmission asset shall be considered at zero cost in ISTS network. {BPDB: Bangladesh Power Development Board}
33. In the circumstances mentioned above it will be just and proper that the transmission tariff for the asset covered under this petition be allowed to be charged from the beneficiaries on the basis set out above. **The Petitioner submits that Encl.-1 to Encl.-4 may please be treated as integral part of this petition.**

**PRAYER:**

34. **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 21 & 22 above.
- b) Approve the Additional capitalization claimed for 2019-24 block and for 2024-29 block for the assets covered under this petition.
- c) Approve the cost variation in COD cost owing to FERV.



- d) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 and Tariff regulations 2024 as per para 21 & 22 above for respective block.
- e) 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.
- f) Allow the petitioner to bill and recover Licensee fee and RLDC fees & charges, separately from the respondents in terms of Regulation 94 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.
- g) 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.
- h) 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 28 above.
- i) 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 28 above.
- j) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall capital spares at the end of tariff block as per actual as mentioned at Para 28 above.
- k) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition as mentioned at para 29 above.



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

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

GURGAON

DATED: 03/10.2024

FILED BY  
POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

  
Zafrul Hasan  
General Manager (Commercial)



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

PETITION NO.: .....

**IN THE MATTER OF:**

**Subject matter:** Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Assets under “Baharampur (POWERGRID) – Bheramara (BANGLADESH) 02ND 400 kV D/C transmission line (INDIAN PORTION)” in Eastern Region under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

**Power Grid Corporation of India Ltd.**

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.  
The Republic Of India

---PETITIONER

**Bangladesh Power Development Board (BPDB)**

WAPA Building,  
MotiJheel Commercial Area,  
Dhaka – 1000,  
People’s Republic of Bangladesh

---RESPONDENT

**AFFIDAVIT VERIFYING THE PETITION**

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



1. That the deponent is the General Manager of Petitioner and is well conversant with the facts and the circumstances of the case and therefore competent to swear this affidavit.
2. That the accompanying Petition under Section 62 of the Electricity Act, 2003, has been filed by my authorised representative/nominated counsel under my instruction and the contents of the same are true and correct to the best of my knowledge and belief.
3. That the contents of Para 01 to 34 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 34 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 *03<sup>rd</sup>* day of **Oct'2024** that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.

  
(DEPONENT)  


*03/10/2024*  
**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)

  
Dilip Nagesh Rozekar

Executive Director (Commercial & RC)

दिलीप रोजेकर / DILIP ROZEKAR

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



**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 7/TT/2022**

**Coram:**

**Shri I.S. Jha, Member  
Shri Arun Goyal, Member  
Shri P.K. Singh, Member**

**Date of Order: 12.04.2023**

**In the matter of:**

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for determination of transmission tariff from the date of commercial operation (COD) to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for transmission assets under "Baharampur (Powergrid)-Bhermara (Bangladesh) 2<sup>nd</sup> 400 kV D/C transmission line (Indian Portion)" in Eastern Region.

**And in the matter of:**

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

**.... Petitioner**

**Vs.**

Bangladesh Power Development Board,  
WAPDA Building, Motijheel Commercial Area,  
Dakha-1000  
(Bangladesh).

**...Respondent**

**For Petitioner :** Shri Vipin Jacob Joseph, PGCIL  
Shri B.B. Rath, PGCIL  
Shri S.S. Raju, PGCIL  
Shri D.K. Biwsal, PGCIL  
Shri Amit Yadav, PGCIL  
Shri Ranjeet Kumar Pandey, PGCIL



**For Respondent :** None

*Page 34 to 76*  
**ATTESTED TRUE COPY**  
**Authorised Signatory**  
**Power Grid Corporation of India Ltd.**  
**Plot No. 2, Sector-29, Gurgaon-122001 (HARYANA)**



Order in Petition No. 7/TT/2022

## ORDER

The Petitioner, Power Grid Corporation of India Limited, has filed the instant petition for determination of transmission tariff from the date of commercial operation (COD) to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of 400 kV D/C (2<sup>nd</sup>) Baharampur (Powergrid)-Bheramara (Bangladesh) line and associated line (Indian Portion) bays at Baharampur Sub-station (hereinafter referred to as the "transmission asset") under "Baharampur (Powergrid)-Bhermara (Bangladesh) 2<sup>nd</sup> 400 kV D/C transmission line (Indian Portion)" (hereinafter referred to as "transmission scheme") in Eastern Region:

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 as invoked for the subject Asset as 27.07.2020 and allow full tariff as claimed under instant petition.*

*4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8.3 above for respective block.*

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

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



7) Allow the petitioner to 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.

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

9) 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 follows:

- (a) The Investment Approval (IA) of the transmission system was accorded by Board of Directors of the Petitioner's Company vide Memorandum No. C/CP/PA 1718-12-0C-IA012 dated 19.9.2017, at an estimated cost of ₹19849 lakh including IDC of ₹1148 lakh, at April, 2017 price level.
- (b) The cross border inter-connection between India and Bangladesh through Baharampur (India) - Bheramara (Bangladesh) 400 kV D/C line along with 500 MW HVDC Back-to-Back terminal at Bheramara, was put into commercial operation in September, 2013.
- (c) The capacity of Bheramara (Bangladesh) HVDC station is being upgraded from 500 MW to 1000 MW by Bangladesh. The system strengthening required in the Indian and Bangladesh side for transfer of about 1000 MW from India to Bangladesh is already under implementation. In regard to N-1 reliability criteria for 1000 MW export to Bangladesh, it was decided that during single circuit outage of



Baharampur–Bheramara 400 kV D/C line, Bangladesh would restrict/reduce the loading on the operating circuit to the permissible extent with the help of run back control/ramping down facility on the HVDC system.

- (d) In order to ensure reliable supply of 1000 MW power to Bangladesh from Baharampur, it was decided in the 12th India-Bangladesh Joint Steering Committee (JSC) meeting held on 11.12.2016, to construct a 2nd 400 kV D/C transmission line from Baharampur (India) to Bheramara (Bangladesh) in matching time frame of 2nd 500 MW HVDC terminal at Bheramara.
- (e) It was decided in the said 12th JSC meeting that the Indian portion of the line may be implemented by the Petitioner and the mechanism of sharing of transmission charges by Bangladesh for Indian portion of this link would be on same principles as for the first Baharampur–Bheramara link.
- (f) Accordingly, Ministry of Power (MoP) vide letter no. 9/5/2016-Trans-Vol-2 dated 1.3.2017, had granted approval for implementation of Indian portion of Baharampur (India) – Bheramara (Bangladesh) 2nd 400 kV D/C line along with 2 no. 400 kV line bays for termination of this line at Baharampur Sub-station (India) through Regulated Tariff Mechanism by the Petitioner.
- (g) The scope of the scheme was discussed and agreed in 19th Standing Committee Meeting (SCM) of ER and in the Standing Committee Meetings (SCMs of State Sectors) of ER held on 1.9.2017 and 3.8.2017 respectively.



- (h) The scope of work covered under “Baharampur (India)-Bheramara (Bangladesh) 2nd 400 kV D/C transmission line (Indian Portion)” is as follows:

**Transmission Line:**

- 400 kV D/C (2nd) Baharampur (Powergrid) - Bheramara (Bangladesh) line with Twin Moose conductor.

**Sub-station:**

- 2 number of 400 kV line bays at Baharampur for termination of Baharampur-Bheramara 2nd 400 kV D/C line
- (i) As per IA dated 19.9.2017, the transmission asset was scheduled to be put into commercial operation within 24 months from the date of IA, and that IA shall be effective from the date of signing of BPTA, i.e. 28.2.2018. Therefore, the SCOD of the transmission asset is 28.2.2020.
- (j) The inter-connection was established between grids of India and Bangladesh through first inter-connection namely: *400 kV D/C Baharampur (India) – Bhermara (Bangladesh) line (COD: 1.9.2013)*.
- (k) Now, the second inter-connection using the transmission asset i.e. 2nd 400 kV D/C Baharampur (India)–Bhermara (Bangladesh) line, whose Indian portion has been completed in May, 2020. The Bangladesh portion of the same line is yet to be completed and thus there is mismatch in completion/execution of the transmission asset. Therefore, for Indian portion of the transmission asset, the Petitioner has proposed to invoke COD as 27.7.2020 under Regulation 5(2) of the 2019 Tariff Regulations.



- (l) The details of transmission asset including scheduled date of commercial operation (SCOD), date of commercial operation (COD) and time over-run are as follows:

<b>SCOD</b>	<b>COD claimed</b>	<b>Time over-run</b>
28.2.2020	27.7.2020	150 days

4. As per the Bulk Power Transfer Agreement (BPTA) dated 28.2.2018 executed between the Petitioner and BPDB, the Petitioner shall implement the Indian portion of the transmission system while PGCB, Bangladesh shall implement Bangladesh portion of the transmission system. Further, BPDB has agreed to pay the transmission charges for the transmission system to be implemented by the Petitioner as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and amendment thereof. Clause 12 of the BPTA provides that this Agreement is effective from the date of its signing and it shall remain operative upto 31.3.2052 subject to its revision by the parties to the Agreement. Clause 14 of the BPTA provides that this Agreement shall be governed by the Indian laws. As per Clause 3.3 of the BPTA, the tariff order issued by this Commission for the transmission assets developed by the Petitioner under the Agreement will be final and binding subject to other legal recourse available to the parties. Accordingly, the tariff for the transmission asset is being determined by this Commission.

5. The Respondent, Bangladesh Power Development Board (BPDB), is procuring transmission services from the Petitioner.

6. The Petitioner has served the petition on the Respondent and notice 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 or the Respondent in response to the aforesaid notices published in the newspapers by the Petitioner. The Respondent did not file any reply.

7. The hearing in this matter was held on 20.12.2022 and order was reserved.

8. This order is issued considering the submissions made by the Petitioner vide affidavits dated 23.2.2021, 29.3.2022, 11.11.2022 and 29.11.2022.

9. Having heard the representatives of the Petitioner and having perused the material on record, we proceed to dispose of the petition.

#### **DETERMINATION OF ANNUAL FIXED CHARGES FROM COD TO 31.3.2024**

10. The Annual Fixed Charges (AFC) claimed by the Petitioner in respect of the transmission asset for 2019-24 tariff period are as follows:

Particulars	(₹ in lakh)			
	2020-21 (Pro-rata for 248 days)	2021-22	2022-23	2023-24
Depreciation	578.58	880.40	894.45	894.45
Interest on Loan	127.68	182.18	172.97	161.91
Return on Equity	608.76	926.77	941.76	941.76
Interest on Working Capital	22.67	34.33	34.83	34.81
O&M Expenses	102.56	156.09	161.41	166.90
<b>Total</b>	<b>1440.25</b>	<b>2179.77</b>	<b>2205.42</b>	<b>2199.83</b>

11. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission asset are as follows:

Particulars	(₹ in lakh)			
	2020-21 (Pro-rata for 248 days)	2021-22	2022-23	2023-24
O&M Expenses	12.58	13.01	13.45	13.91
Maintenance Spares	22.64	23.41	24.21	25.04
Receivables	261.34	268.74	271.90	270.47
<b>Total</b>	<b>296.56</b>	<b>305.16</b>	<b>309.56</b>	<b>309.42</b>
Rate of Interest (in %)	11.25	11.25	11.25	11.25





Particulars	2020-21 (Pro-rata for 248 days)	2021-22	2022-23	2023-24
Interest on Working Capital	22.67	34.33	34.83	34.81

**Date of Commercial Operation (“COD”)**

12. The Petitioner has claimed COD of the transmission asset as 27.7.2020 under Regulation 5(2) of the 2019 Tariff Regulations as the downstream assets under the scope of work of Bangladesh Power Development Board (BPDB) were not ready.

13. The Petitioner and BPDB have entered into Bulk Power Transmission Agreement (BPTA) on 28.2.2018. As per para 3.2(i) of the said BPTA, in the event of mismatch in completion of the transmission system in Bangladesh by PGCB, the transmission charges for Indian portion shall be payable from the date of its readiness declared by the Petitioner. The said para is extracted as follows:

*“3.2 BPDB shall pay the following transmission tariff and other charges on account of :*

*(i) Monthly charges for the said transmission system mentioned at Clause 2.1 to POWERGRID, India with effect from the DOCO in accordance with norms/order/notification issued by CERC from time to time. Further, in case of mismatch in completion of its transmission system in Bangladesh by PGCB, the transmission charges for Indian portion shall be payable from the date of its readiness declared by POWERGRID.”*

14. The Petitioner has submitted that its transmission asset was ready on 27.7.2020. In support of readiness of its transmission asset, the Petitioner has submitted certificate of successful trial operation completed on 26.7.2020 on ‘no-load’ basis.

15. The Petitioner has submitted that it had given intimation of completion of Indian portion of the line and its successful charging on ‘no-load’ basis on 7.5.2020 with a request to expedite Bangladesh portion for early power flow vide a trial



operation letter dated 14.5.2020. Subsequent requests were also made to the Project Director (BPDB) vide e-mails dated 16.5.2020, 9.6.2020, 2.7.2020, 6.10.2020 and 17.11.2020 to expedite Bangladesh portion of the transmission line. Further, a letter dated 3.12.2020 was also sent to the Secretary, BPDB to provide the latest status of line works associated with Bangladesh portion along with tentative completion date.

16. In support of COD of the transmission asset, the Petitioner has submitted certificate of idle charging of part of the transmission element dated 16.9.2020 certifying completion of successful trial run operation completed on 26.7.2020, CMD certificate and self -declaration of COD dated 3.12.2020.

17. Taking into consideration certificate of successful idle charging of part of the transmission element, CMD certificate and self declaration of COD as required under the Grid Code, COD of the transmission asset is approved as 27.7.2020.

### **Capital Cost**

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

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

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

- (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;***
- (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;***
- (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;***
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;***



- (e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;*
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) Adjustment of revenue earned by the transmission licensee by using the Asset-before the date of commercial operation;*
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway.*
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) Expenditure on account of change in law and force majeure events; and*
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

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

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

*(4) The capital cost in case of existing or new hydro generating station shall also include:*

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*



(b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.

(5) The following shall be excluded from the capital cost of the existing and new projects:

- (a) The Asset-forming part of the project, but not in use, as declared in the tariff petition;
- (b) De-capitalised Asset-after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

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

19. The Petitioner vide Management Certificate dated 8.1.2021 has claimed the following capital cost incurred as on COD and Additional Capital Expenditure (ACE) incurred and projected to be incurred, in respect of the transmission asset:

Apportioned Approved Cost as per FR	Capital Cost claimed as on COD	Actual/ Projected ACE				Total Capital Cost as on 31.3 2024
		2020-21	2021-22	2022-23	2023-24	
19848.73	15636.29	552.52	525.00	0.00	0.00	16713.81

20. The estimated completion cost of the transmission asset based on the Management Certificate works out to ₹16713.81 lakh including IEDC and IDC which is within the FR apportioned approved cost of ₹19848.73 lakh. Therefore, there is no cost over-run.



### **Time Over-run**

21. As per IA dated 19.9.2017, the transmission asset was scheduled to be put into commercial operation within 24 months from the date of IA, and that IA is effective from the date of signing of BPTA, i.e. from 28.2.2018. Therefore, SCOD of the transmission asset is 28.2.2020, against which it has been declared under commercial operation on 27.7.2020. Therefore, there is time over-run of 150 days in achieving COD of the transmission asset.

22. The Petitioner has submitted that the timeline specified by the Commission in Appendix-I to Regulation 24(2)(i) of the 2014 Tariff Regulations, for completion of a 400 kV D/C transmission line in plain area is 34 months. However, in the instant case, the completion schedule for 400 kV D/C transmission line was compressed and kept as 24 months in the IA keeping in view of early facilitation of export/import of power and it was built upon bi-lateral ties with Bangladesh.

23. The Petitioner has submitted the following reasons in its petition for time over-run:

**i. Delay due to Right of Way (RoW) issues (6 Months)**

The transmission line is traversing through Murshidabad and Birbhum districts of West Bengal and Pakur District of Jharkhand. The implementation of the transmission line was hampered by the persistent RoW issues at various locations. Before the start of construction, the Petitioner had proactively apprised the district authorities in advance (August, 2016) for their co-operation for Right of Way issues likely to be encountered. The RoW issues involved demand of exorbitant amount of crop compensation, land compensation, construction of structures/buildings



in Right of way of line, man-handling of gang workers, etc. Further, wherever possible, persuasive measures were adopted to pacify the land-owners/ villagers agitating against the line construction. However, at certain locations verbal persuasions were not sufficient and eventually the help and assistance of District Administration and Police Department was sought to mitigate the RoW issues. In this regard, intervention on collective basis was also sought from Power Secretary/Commissioner to Government of West Bengal (WB) to resolve the RoW issues without further delay. The broad chronology of the RoW issues faced and steps undertaken by the Petitioner to mitigation them are as follows:

<b>Date</b>	<b>Remarks</b>
14.3.2019	Letter to SDO (Sub-Divisional Officer), Domkal, Murshidabad, WB requesting assistance in mitigating RoW issue and resumption of digging works at location no. 73/1.
3.4.2019	Letter to District Magistrate (DM), Berhampore, Murshidabad, WB requesting to intervene and remove RoW issues at following locations: (i) 59/0 to 60/0 : Foundations works obstructed (ii) 65/0 to 65A/0: Exorbitant compensation demand (iii) 73/1 & 74/0: Created small pond along ROW
26.8.2019	Letter to SDO (Sub-Divisional Officer), Domkal, Murshidabad, WB requesting for assistance and release of construction machinery from the custody of villagers for resumption of digging works at location no. 74/0.
27.8.2019	Letter to SP Murshidabad, WB requesting for assistance and police deployment/protection for mitigating the RoW issues and resumption of works at location nos. 64/2, 65/0, 65A/0, 73/1, 74/0, 44/0, 13/0, 1/7, 1/8, 2/0 and 1/1.
5.9.2019	Public notice issued by Block Development Officer, (BDO) – Murshidabad, WB, calling all villagers for urgent meeting who were opposing the construction of the transmission line.
19.9.2019	Letter to BDO, Domkal, Murshidabad, WB requesting for assistance in mitigating RoW issues and resumption of works at various locations where villagers were demanding exorbitant compensation and had also sown bamboo plant.
17.10.2019	Letter of BDO, Domkal, Murshidabad to Inspector-in charge, Domkal, Murshidabad, WB requesting for assistance to Powergrid for police deployment/ protection for mitigating RoW issues and resumption of



	works at various locations.
17.10.2019	Letter to BDO, Domkal, Murshidabad, WB requesting for assistance in mitigating RoW issues and resumption of works at location nos. 69/0 to 70/0 where villagers were demanding exorbitant compensation and had also sown bamboo plants.
17.10.2019	Letter of BDO, Domkal, Murshidabad to Inspector-in charge, Domkal, Murshidabad, WB requesting for assistance to Powergrid for police deployment/protection at location nos. 69/0 to 70/0.
8.11.2019	Letter to BDO, Domkal, Murshidabad, WB requesting for assistance in mitigating RoW issues and resumption of works at Loc. No. 74/0.
8.11.2019	Letter to BDO, Domkal, Murshidabad, WB requesting for assistance in mitigating RoW issues and resumption of stringing works at Loc. Nos. 69/0 to 70/0.
<b>8.1.2020</b>	Letter from the Petitioner to Additional Chief Secretary (Power), WB Govt. requesting for assistance in mitigating ROW issues and resumption of works at various locations of the transmission line.
3.2.2020	Letter to SDO, Domkal, Murshidabad, WB requesting for assistance in removing ROW issues and exorbitant compensation demands at location no. 74/0.

The Petitioner has submitted that at various locations, RoW issues were resolved by convincing the land owners whereas at other locations, the breakthrough was achieved by involving the State/District machinery. Further, the Petitioner was continuously involved in the task of removing the RoW hindrances and the same was largely resolved by the Petitioner. However, at few of the locations, namely, 64/2, 65/0, 65A/0, 69/0 – 70/0, 73/1, 74/0, 44/0, 13/0, 1/7, 1/8, 2/0, and various others, the issue still persists and continuous efforts are being made to resolve the same so as to complete the transmission line works by May, 2020. Owing to these uncontrollable RoW issues, accompanied by periods of negligible activity, de-mobilization and re-mobilization of labourers/gangs, etc, considerable time was lost initially from March – April, 2019 (i.e. approximate 02 months) and later on from August, 2019 to February, 2020 (i.e. approx. 06 months).



**ii. Delay due to Worldwide COVID-19 Pandemic (approximately 3 months):** The Petitioner has submitted that corona virus situation posed the greatest potential harm as unforeseen/unplanned interruption which caused delay. The Petitioner faced a multitude of challenges in their projects and the same are as follows:

Nation-wide lockdown:

Phase -1: 25<sup>th</sup> March, 2020 – 14<sup>th</sup> April, 2020 (21 days)

Phase-2: 15<sup>th</sup> April, 2020 – 3<sup>rd</sup> May, 2020 (19 days)

Phase-3: 4<sup>th</sup> May, 2020 – 17<sup>th</sup> May, 2020 (14 days)

Phase-4: 18<sup>th</sup> May, 2020 – 31<sup>st</sup> May, 2020 (14 days)

Unlock:

Unlock 1.0: 1<sup>st</sup> June, 2020 – 30<sup>th</sup> June, 2020 (30 days)

Unlock 2.0: 1<sup>st</sup> July, 2020 – 31<sup>st</sup> July, 2020 (31 days)

Unlock 2.0: 1<sup>st</sup> August, 2020 – 31<sup>st</sup> August, 2020 (31 days)

The Petitioner has submitted that the lockdown restricted people from stepping out of their homes. All transport services—road, air and rail were suspended, with exceptions for transportation of essential goods, fire, police and emergency services. Educational institutions, industrial establishments and hospitality services were also suspended. Services such as food shops, banks and ATMs, petrol pumps, other essentials and their manufacturing were exempted. The Home Ministry stated that anyone who fails to follow the restrictions may face imprisonment up to one year. The Government locked down all the cities and restricted the movement from one place to another. The movement restriction affected the suppliers' chain, transportation shortage, worker absenteeism due to





illness/quarantine/migration labour shortages. This resulted in decrease in output and delayed all country-wide ongoing projects. The lock-down imposition and voluntary step back of construction workers was unavoidable and complicating things further. The site was closed or access was restricted to contain Covid-19 outbreak. The contractor was not able to carry out the works as a result of action by the Governments to prevent the spread of Covid-19. There were specific Covid-19 related challenges such as suppliers' delivery issues, worker absenteeism due to illness, delayed issuance of permits, travel restrictions and inefficiencies due to social distancing on the job site. Also, with lack of engineering and technical support as well as supply chain disruptions being the major factor impacting project schedule and implementations. Thus, execution of various projects including the transmission project faced delay due to squeezing of supply lines and construction activities. When construction resumed, additional delay and inefficiencies further pushed back completion dates. The Petitioner was unable to start construction. The biggest hurdle was that the supply chain was not fully restored. Besides that, if someone was infected on the construction site after the work started, the area was sealed and all related people were quarantined for 14-28 days. Construction pace came to a grinding halt. Further, administrative action/FIRs were lodged against the sub-contractors.

With halting of various line construction activities, the work came to stand still for almost 2-3 months (i.e. from end of March, 2020 to early May, 2020) and gradually the work started after Government directives. The delay was beyond the control of the Petitioner and that even the events associated with



delay were unforeseen. Various problems occurring concurrently could have delayed the project enormously, however, experience and expertise of the Petitioner in project planning and execution curtailed the delay to 5 months only through efficient efforts.

24. We have considered the submission of the Petitioner. As per BPTA dated 28.2.2018, the transmission asset is scheduled to be put into commercial operation within 24 months i.e. by 28.2.2020, against which the transmission asset was put into commercial operation on 27.7.2020 with time over-run of about 150 days. The Petitioner has submitted that the normal timeline specified for 400 kV D/C transmission lines is 34 months in Regulation 24(2)(i) of the 2014 Tariff Regulations. However, the Petitioner had compressed the completion schedule of the transmission asset to 24 months to facilitate early import of power by Bangladesh. The timeline specified under Regulation 24(2)(i) of the 2014 Tariff Regulations is for grant of additional RoE of 0.5 for the transmission assets which are put into commercial operation within the specified period. Therefore, the Petitioner's attempt to draw any support from the said Regulation for condonation of time over-run does not hold any merit.

25. The Petitioner has submitted that the transmission asset is delayed due to RoW issues in construction of transmission line and Covid-19 pandemic. From the submissions of the Petitioner, it is observed that the Petitioner has faced RoW problems at various locations, namely, at location nos. 1/1, 1/7, 1/8, 2/0, 13/0, 44/0, 59/0 to 60/0, 65/0 to 65A/0, 73/1 & 74/0 and 44/0. The last RoW issue was faced by the Petitioner was on 3.2.2020 at location No. 74/0. The Petitioner has furnished details of correspondences exchanged with various authorities along with

supporting documents. From the submissions of the Petitioner, it is apparent that RoW issues affected the execution of transmission asset from 14.3.2019 to 3.2.2020 at various locations.

26. We have also gone through the monthly progress report of Central Electricity Authority (CEA) pertaining to cross-border/Inter-State Transmission Schemes for the months of January, 2020, February, 2020 and March, 2020. As per the CEA monthly progress report, it is observed that out of the total length of 172 circuit km (ckm), the Petitioner has completed 156 ckm upto January, 2020, 169 ckm upto February, 2020 and 172 ckm upto March, 2020. In the month of March, 2020, the following has been recorded in the report and the same is as follows:

*“Work completed. Charging matching with Bangladesh side readiness. Also, work completely at standstill due to lockdown of the entire country due to Corona Pandemic. The Ministry of Home Affairs on 24.03.20 invoked the National Disaster Management Act and declared lockdown of the entire country for 21 days”*

27. In the light of above, we are of the view that duration of time from 28.2.2020 to 24.3.2020 (25 days), the execution of the transmission asset was impacted due to RoW issues and the same was beyond the control of the Petitioner. Therefore, time over-run of 25 days for the period from 28.2.2020 to 24.3.2020 due to RoW issues is accordingly condoned.

**Delay due to Covid-2019 Pandemic.**

28. The Petitioner has submitted that work of the transmission asset remained affected for 2-3 months from March, 2020 to May, 2020 due to Covid-19 pandemic. The Petitioner has further submitted that due to Covid-19 pandemic, i.e. Phase-I from 25.3.2020 to 14.4.2020 (21 days), Phase-2 from 15.4.2020 to 3.5.2020 (19 days), Phase-3 from 4.5.2020 to 17.5.2020 (14 days) and Phase 4 from 18.5.2020 to 31.5.2020 (14 days), aggregating to about 68 days, the work of the transmission



line was affected.

29. We have considered the above submissions of the Petitioner. We agree with the submissions of the Petitioner that on account of Covid-19 pandemic, the Government of India issued various directions for lock-down and also imposed certain restrictions and the same were in force during Phase-I from 25.3.2020 to 14.4.2020 (21 days), Phase-2 from 15.4.2020 to 3.5.2020 (19 days), Phase-3 from 4.5.2020 to 17.5.2020 (14 days) and Phase 4 from 18.5.2020 to 31.5.2020 (14 days), aggregating to about 68 days. Therefore, we condone the delay of 68 days in execution of the transmission asset on account of Covid-19 for the period from 25.3.2020 to 31.5.2020, as detailed above.

30. The Petitioner has not given any specific reasons for the delay from 1.6.2020 to 27.7.2020 (57 days). Accordingly, time over-run of 57 days is not condoned.

31. As discussed above, out of the total time over-run of 150 days, time over-run of 25 days due to RoW issues and 68 days due to Covid-19 pandemic is observed to be beyond the control of the Petitioner and accordingly it is condoned. Accordingly, the IDC and IEDC for the 93 days is allowed to be capitalised.

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

32. The Petitioner has claimed IDC in respect of the transmission asset and has submitted the Management Certificate dated 8.1.2021 in support of the same. The Petitioner has submitted the computation of IDC along with year-wise details of the IDC discharged.

33. The loan amount as on COD has been mentioned in Form-6 and Form-9C.



The loan details submitted in Form-9C for 2019-24 tariff period and IDC computation statement have been considered for the purpose of IDC calculation on cash basis and on accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged. However, in the statement showing IDC discharged up to COD, the Petitioner has indicated the floating rate of interest of the loans deployed. IDC on cash basis up to COD has been worked out on the basis of loan details given in the statement showing discharge of IDC and Form-9C for the transmission asset. The Petitioner is directed to submit information on actual interest rates at the time of truing-up.

34. Accordingly, based on the information furnished by the Petitioner, IDC considered, is as follows:

(₹ in lakh)						
IDC as per Auditor's Certificate	IDC Admissible	IDC disallowed due to time over-run not condoned	IDC Discharged as on COD	IDC Un-discharged as on COD	IDC Discharge During	
					2020-21	2021-22
A	B	C=A-B	D	E=B-D	F	G
367.42	346.83	20.59	339.20	7.62	5.39	2.23

35. The Petitioner has claimed IEDC of ₹726.13 lakh and has submitted Management Certificate in support of the same. The Petitioner has also submitted that entire IEDC has been discharged as on COD in respect of the transmission asset. Further, IEDC has been deducted on account of time over-run not condoned on pro-rata basis, Accordingly, IEDC allowed is as follows:

(₹ in lakh)		
IEDC Claimed	IEDC disallowed due to time over-run not condoned	IEDC Allowed
726.13	47.03	679.10

**Initial Spares**



36. Regulation 23(d) of the 2019 Tariff Regulations provides 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%”*

37. The Petitioner has claimed the following Initial Spares:

Particulars	Plant & Machinery cost for calculation of initial spares (₹ in lakh)	Initial spares claimed		Ceiling limit as per Regulations (in %)
		Amount (₹ in lakh)	Percentage (in %)	
Transmission Line	13227.20	350.02	2.65	1.00
Sub-station	2181.35	71.54	3.28	6.00
PLCC	211.71	27.77	13.12	3.50

38. The Petitioner has claimed Initial Spares separately for transmission asset for PLCC under “Communication System” in the instant petition. The Commission vide order dated 24.1.2021 in Petition No. 126/TT/2020 observed that PLCC is a part of sub-station and accordingly did not allow separate O&M Expenses for PLCC. In view of the findings of the Commission as recorded in order dated 24.1.2021 in Petition No. 126/TT/2020, we are of the view that PLCC has to be considered as a part of sub-station. Therefore, cost of PLCC has been clubbed with the cost of sub-station while computing the Initial Spares. The Initial spares claimed by the Petitioner towards transmission line beyond the ceiling of 1% and the same has been restricted to ceiling of 1%. The initial spares allowed are as follows:



Particulars	Plant & Machinery Cost up to cut-off date (₹ in lakh) (excluding IDC and IEDC)	Initial Spares Claimed (₹ in lakh)	Allowable Initial Spares (₹ in lakh)	Norm (in%)	Initial Spares allowed (₹ in lakh)	Excess Initial Spares (₹ in lakh)
Transmission Line	13227.20	350.02	130.07	1	130.07	219.95
Sub-station	2393.06	99.31	146.41	6	99.31	0.00

### Capital Cost allowed as on COD

39. Accordingly, capital cost allowed in respect of the transmission asset as on COD is as follows:

(₹ in lakh)					
Capital Cost claimed in Auditor's Certificate as on COD (A)	Less: IDC disallowed due to time over-run not condoned (B)	Less: Un-discharged IDC as on COD (C)	Less: IEDC disallowed due to time over-run not condoned (D)	Less: Excess Initial Spares disallowed (E)	Capital Cost as on COD (F) = (A-B-C-D-E)
15636.29	20.59	7.62	47.03	219.95	15341.09

### Additional Capital Expenditure ("ACE")

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

***"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:*

*(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 ACE incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the 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; and g) Raising of ash dyke as a part of ash disposal system.*

*(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:*

*(a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations.*

*(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;*

*(c) The replacement of such asset or equipment is necessary on account of*

*(d) The replacement of such asset or equipment has otherwise been allowed by the Commission.”*

41. The Petitioner has claimed actual/projected ACE for 2019-24 tariff period on account of balance and retention payments under Regulation 24(1)(a) and





Regulation 24(1)(b) for works executed within the cut-off date. The details are as follows:

(₹ in lakh)

Actual/ Projected Add-Cap			
2020-21	2021-22	2022-23	2023-24
552.52	525.00	0.00	0.00

42. Further, the Petitioner vide affidavit dated 29.3.2022 has submitted the liability flow statement. The details are as follows:

Head wise / Party wise	Particulars	Discharge			
		2020-21	2021-22	2022-23	2023-24
Associated Power Structure & Etc	Transmission Line	76.49	25.00	0.00	0.00
Associated Power Structure & Etc	Sub-station	476.03	500.00	0.00	0.00
<b>Total ACE</b>		<b>552.52</b>	<b>525.00</b>	<b>0.00</b>	<b>0.00</b>

43. We have considered the submissions of the Petitioner. ACE claimed is on account of balance and retention payments and is allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. The actual/ projected ACE allowed is subject to truing up in respect of the transmission asset is as follows:

(₹ in lakh)

Particulars	Actual / Proposed ACE			
	2020-21	2021-22	2022-23	2023-24
Proposed ACE allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations	552.52	525.00	0.00	0.00
Add: IDC discharge	5.39	2.23	0.00	0.00
<b>Total</b>	<b>557.91</b>	<b>527.23</b>	<b>0.00</b>	<b>0.00</b>

#### Capital Cost as on 31.3.2024

44. Accordingly, capital cost allowed in respect of the transmission asset as on 31.3.2024 is as follows:

(₹ in lakh)

Capital Cost allowed as on COD	Actual / Projected ACE				Total Capital Cost as on 31.3.2024
	2020-21	2021-22	2022-23	2023-24	



15341.09	557.91	527.23	0.00	0.00	16426.23
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### Debt-Equity Ratio

45. Regulations 18 of the 2019 Tariff Regulations provides as follows:

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

*Provided that:*

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

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

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

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

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

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

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



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

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation.”

46. The details of debt-equity considered for the purpose of computation of tariff for 2019-24 period in respect of the transmission asset is as follows:

Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	10738.76	70.00	11498.36	70.00
Equity	4602.33	30.00	4927.87	30.00
<b>Total</b>	<b>15341.09</b>	<b>100.00</b>	<b>16426.23</b>	<b>100.00</b>

## Depreciation

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

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

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

(2) *The value base for the purpose of depreciation shall be the capital cost of the Asset-admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the Asset-for part of the year, depreciation shall be charged on pro rata basis.”*

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

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

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

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

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

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

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



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

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

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

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

*(9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.*

*(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of*

*a) twenty-five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or*

*b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or*

*c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.”*

48. We have considered the submissions of the Petitioner. The IT equipment has been considered as part of the Gross Block and depreciated using Weighted Average Rate of Depreciation (WAROD). WAROD has been worked out and placed as Annexure-I after considering the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT



equipment has been considered nil, i.e., IT asset has been considered as 100% depreciable. Depreciation allowed in respect of the transmission asset for 2019-24 tariff period is as follows:

(₹ in lakh)					
	Particulars	2020-21 (Pro-rata for 248 days)	2021-22	2022-23	2023-24
A	Opening Gross Block	15341.09	15899.00	16426.23	16426.23
B	Addition during the year 2019-24 due to projected ACE	557.91	527.23	0.00	0.00
C	Closing Gross Block (A+B)	15899.00	16426.23	16426.23	16426.23
D	Average Gross Block (A+C)/2	15620.05	16162.62	16426.23	16426.23
E	Average Gross Block (90% depreciable assets)	15520.33	16062.88	16326.49	16326.49
F	Average Gross Block (100% depreciable assets)	99.72	99.74	99.75	99.75
G	Depreciable value (excluding IT equipment and software) (E*90%)	13968.30	14456.59	14693.84	14693.84
H	Depreciable value of IT equipment and software (F*100%)	99.72	99.74	99.75	99.75
I	Total Depreciable Value (G+H)	14068.01	14556.33	14793.59	14793.59
J	Weighted average rate of Depreciation (WAROD) (in %)	5.36	5.35	5.35	5.35
K	Elapsed useful life at the beginning of the year (Year)	0.00	0.00	1.00	2.00
L	Balance useful life at the beginning of the year (Year)	34.00	34.00	33.00	32.00
M	<b>Depreciation during the year (D*J)</b>	<b>568.46</b>	<b>865.29</b>	<b>879.21</b>	<b>879.21</b>
N	Cumulative Depreciation at the end of the year	568.46	1433.75	2312.97	3192.18
O	Remaining Aggregate Depreciable Value at the end of the year	13499.55	13122.58	12480.62	11601.40

### **Interest on Loan ("IoL")**

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

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

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of asset, the repayment shall be adjusted by taking into account



*cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.*

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

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

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

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

*(5a) The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.*

*(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*

*(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing”.*

50. The weighted average rate of interest on IoL has been considered on the basis of the rates prevailing as on COD for respective loans. The Petitioner has prayed that change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up.

51. In view of above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the transmission asset is as follows:

					(₹ in lakh)
	Particulars	2020-21 (Pro-rata for 248 days)	2021-22	2022-23	2023-24

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	Particulars	2020-21 (Pro-rata for 248 days)	2021-22	2022-23	2023-24
A	Gross Normative Loan	10738.76	11129.30	11498.36	11498.36
B	Cumulative Repayments up to Previous Year	0.00	568.46	1433.75	2312.97
C	Net Loan-Opening (A-B)	10738.76	10560.84	10064.61	9185.40
D	Addition due to ACE	390.54	369.06	0.00	0.00
E	Repayment during the year	568.46	865.29	879.21	879.21
F	Net Loan-Closing (C+D-E)	10560.84	10064.61	9185.40	8306.18
G	Average Loan (C+F)/2	10649.80	10312.73	9625.00	8745.79
H	Weighted Average Rate of Interest on Loan (in %)	1.7333	1.7359	1.7662	1.8194
I	Interest on Loan (G*H)	125.42	179.02	170.00	159.12

### Return on Equity (“RoE”)

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

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

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

*Provided that return on equity in respect of Additional Capitalization after cut-off date beyond the original scope excluding Additional Capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.*

*Provided further that:*

- i. *In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;*
- ii. *in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report*





submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

- iii. in case of a thermal generating station, with effect from 1.4.2020:
- rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
  - an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

(3) The return on equity in respect of additional capitalization on account of emission control system shall be computed at the base rate of one year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of operation (ODe) occurs plus 350 basis point, subject to ceiling of 14%,"

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

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

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

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

**Illustration-**

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

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

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



- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;  
 (b) Estimated Advance Tax for the year on above is Rs 240 crore;  
 (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;  
 (d) Rate of return on equity =  $15.50 / (1 - 0.24) = 20.395\%$ .

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

53. The Petitioner has submitted that MAT rate is applicable to it. MAT rate applicable for the year 2019-20 has been considered for the purpose of RoE for the period 2021-24, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the transmission asset is as follows:

(₹ in lakh)					
	Particulars	2020-21 (Pro-rata for 248 days)	2021-22	2022-23	2023-24
A	Opening Equity	4602.33	4769.70	4927.87	4927.87
B	Addition due to ACE	167.37	158.17	0.00	0.00
C	Closing Equity (A+B)	4769.70	4927.87	4927.87	4927.87
D	Average Equity (A+C)/2	4686.01	4848.79	4927.87	4927.87
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782
H	Return on Equity (Pre-tax) (D*G)	598.00	910.70	925.55	925.55

#### Operation & Maintenance Expenses (“O&M Expenses”)

54. Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations provide as follows:

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



<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>Norms for sub-station Bays (₹ Lakh per bay)</b>					
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
<b>Norms for Transformers (₹ Lakh per MVA)</b>					
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
<b>Norms for AC and HVDC lines (₹ Lakh per km)</b>					
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
<b>Norms for HVDC stations</b>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947



<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)</b>	2,563	2,653	2,746	2,842	2,942

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

*Provided further that:*

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
  - ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
  - iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
  - iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;*
  - v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*
  - vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.*
- (b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.*
- (c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:*

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



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

55. The O&M Expenses claimed by the Petitioner in respect of the transmission asset are as follows:

Particulars	(₹ in lakh)			
	2020-21 (Pro-rata for 248 days)	2021-22	2022-23	2023-24
<b>Sub-station Bays (Number)</b>				
400 kV: Behrampur : 2 Nos Line Bays	2	2	2	2
<b>Norm (₹ lakh/bay)</b>				
400 kV	33.28	34.45	35.66	36.91
<b>Total Sub-station Bays O&amp;M Expenses</b>	<b>66.56</b>	<b>68.90</b>	<b>71.32</b>	<b>73.82</b>
<b>AC Lines</b>				
400 kV D/C Baharampur - Bheramara (Indian Portion)	86.816	86.816	86.816	86.816
400 kV M/C	0.61	0.61	0.61	0.61
<b>Norms</b>				
D/C Twin/Triple Conductor	0.912	0.944	0.977	1.011
M/C Twin/Triple Conductor	1.598	1.654	1.713	1.773
<b>Total Transmission Line</b>	<b>80.15</b>	<b>82.96</b>	<b>85.86</b>	<b>88.85</b>
<b>Communication System</b>				
PLCC	211.70	211.70	211.70	211.70
<b>Norms (in %)</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>Total Communication System</b>	<b>4.23</b>	<b>4.23</b>	<b>4.23</b>	<b>4.23</b>
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>102.56</b>	<b>156.10</b>	<b>161.42</b>	<b>166.91</b>

56. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 @2% of its original project cost in the instant petition and the Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and 2019 Tariff Regulations and the norms for sub-station has been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed.



57. The O&M Expenses allowed are as follows:



(₹ in lakh)

Particulars	2020-21 (Pro-rata for 248 days)	2021-22	2022-23	2023-24
<b>Sub-station Bays (Number)</b>				
400 kV: Behrampur : 2 Nos Line Bays	2	2	2	2
<b>Norm (₹ lakh/bay)</b>				
400 kV	33.28	34.45	35.66	36.91
<b>Total Sub-station Bays O&amp;M Expenses</b>	<b>66.56</b>	<b>68.90</b>	<b>71.32</b>	<b>73.82</b>
<b>AC Lines</b>				
400 kV D/C Baharampur - Bheramara (Indian Portion)	86.816	86.816	86.816	86.816
400 kV M/C	0.61	0.61	0.61	0.61
<b>Norms</b>				
D/C Twin/Triple Conductor	0.912	0.944	0.977	1.011
M/C Twin/Triple Conductor	1.598	1.654	1.713	1.773
<b>Total Transmission Line</b>	<b>80.15</b>	<b>82.96</b>	<b>85.86</b>	<b>88.85</b>
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>99.68</b>	<b>151.86</b>	<b>157.18</b>	<b>162.67</b>

### Interest on Working Capital (“IWC”)

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

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

.....

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

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

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

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

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

Provided that in case of triuing-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. Definition - In these regulations, unless the context otherwise requires:-**

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

59. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2020. The Petitioner has considered the rate of IWC as 11.25%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 11.25% (SBI 1year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21 and 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-24. The components of the working capital and interest allowed thereon is as follows:

(₹ in lakh)				
Particulars	2020-21 (Pro-rata for 248 days)	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	12.23	12.66	13.10	13.56
Working Capital for Maintenance Spares (15% of O&M Expenses)	22.01	22.78	23.58	24.40
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	256.54	263.62	266.77	265.38
<b>Total Working Capital</b>	<b>290.77</b>	<b>299.06</b>	<b>303.45</b>	<b>303.34</b>
Rate of Interest for working capital (in %)	11.25	10.50	10.50	10.50
<b>Interest of working capital</b>	<b>22.23</b>	<b>31.40</b>	<b>31.86</b>	<b>31.85</b>

**Annual Fixed Charges for 2019-24 Tariff Period**

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

(₹ in lakh)				
Particulars	2020-21 (Pro-rata for 248 days)	2021-22	2022-23	2023-24
Depreciation	568.46	865.29	879.21	879.21
Interest on Loan	125.42	179.02	170.00	159.12
Return on Equity	598.00	910.70	925.55	925.55



Particulars	2020-21 (Pro-rata for 248 days)	2021-22	2022-23	2023-24
Operation and Maintenance Expenses	99.68	151.86	157.18	162.67
Interest on Working Capital	22.23	31.40	31.86	31.85
<b>Total</b>	<b>1413.79</b>	<b>2138.27</b>	<b>2163.80</b>	<b>2158.40</b>

#### **Filing Fees and Publication Expenses**

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

#### **Licence Fees and RLDC Fees and Charges**

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

#### **Goods and Services Tax**

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



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

### **Security Expenses**

65. The Petitioner has submitted that security expenses in respect of transmission asset is not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and consequential IWC.

66. We have considered the above submissions of the Petitioner. The Petitioner has claimed consolidated security expenses on projected basis for 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 has approved security expenses from 1.4.2019 to 31.3.2024. Therefore, security expenses will be shared in terms of the Commission's order dated 3.8.2021 in Petition No. 260/MP/2020. Accordingly, 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**

67. The Petitioner has sought reimbursement of capital spares at the end of 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**

68. Clause 3.0 of the BPTA dated 28.2.2018 signed between the Petitioner and



BPDB stipulates that transmission charges shall be paid to the Petitioner by BPDB. Therefore, the billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the BPTA signed between BPDB and the Petitioner. The transmission charges shall be paid by BPDB as per the provisions of Clause 3.0 of the BPTA and the same shall not be considered under the Common pool. The transmission asset shall be considered at zero cost in ISTS network.

69. To summarise,

(a) AFC allowed in respect of the transmission asset for 2019-24 tariff period in the instant order are as follows:

(₹ in lakh)			
2020-21 (Pro-rata for 248 days)	2021-22	2022-23	2023-24
1413.79	2138.27	2163.80	2158.40

70. Annexure-I given hereinafter form part of the order.

71. This order disposes of Petition No. 7/TT/2022 in terms of the above discussions and findings.

**sd/-**  
**(P.K. Singh)**  
**Member**

**sd/-**  
**(Arun Goyal)**  
**Member**

**sd/-**  
**(I.S. Jha)**  
**Member**



Annexure – I

2019-24 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE				Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciatio n (%)	Annual Depreciation as per Regulations			
		2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)			2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Transmission Line	13811.55	81.34	27.01	0.00	0.00	13,919.90	5.28	731.40	734.26	734.97	734.97
Sub-Station	1219.15	476.46	500.18	0.00	0.00	2195.79	5.28	76.95	102.73	115.94	115.94
PLCC	210.69	0.07	0.03	0.00	0.00	210.80	6.33	13.34	13.34	13.34	13.34
IT Equipment and software	99.70	0.04	0.01	0.00	0.00	99.75	15.00	14.96	14.96	14.96	14.96
<b>Total</b>	<b>15341.09</b>	<b>557.91</b>	<b>527.23</b>	<b>0.00</b>	<b>0.00</b>	<b>16426.23</b>		<b>836.64</b>	<b>865.29</b>	<b>879.21</b>	<b>879.21</b>
<b>Average Gross Block (₹ in lakh)</b>								15620.05	16162.62	16426.23	16426.23
<b>Weighted Average Rate of Depreciation (in %)</b>								5.36	5.35	5.35	5.35

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 ATTESTED TRUE COPY  
 Authorised Signatory  
 Power Grid Corporation of India Ltd.  
 Plot No. 2, Sector-29, Gurgaon-12001 (HARYANA)



**BANDYOPADHYAYA BHAUMIK & CO.**  
**COST ACCOUNTANTS**

12 Government Place East,  
 Regent House, 2nd Floor,  
 Kolkata- 700069  
 Mob- 8287827749  
 E mail: bbhco1994@gmail.com  
 Website: bbcostaccountants.com

Certificate Ref. No. BB/ER-PGCIL-CERT/24-25/02

Dated: 11/09/2024

**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, KatwariaSarai, New Delhi-110016 and on the basis of our verification, we certify that **Capital Cost for Baharampur (POWERGRID)- Bheramara (Bangladesh) 2nd 400 KV D/C Line and Associated line bays at Baharampur Sub Station in Eastern Region-II** of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 27.07.2020 is detailed as under:

						(₹ in Lakhs)
S/N	Particulars	Capital Cost	IEDC	IDC	Total	
1	Expenditure upto 26.07.20 (DOCO)*	14685.80	726.13	367.42	15779.35	
2	Expenditure from 27.07.20 -31.03.21	222.76	0.00	0.00	222.76	
3	Expenditure from 01.04.21 - 31.03.22	805.94	0.00	0.00	805.94	
4	Expenditure from 01.04.22-31.03.23	229.15	0.00	0.00	229.15	
5	Expenditure from 01.04.23-31.03.24	86.31	0.00	0.00	86.31	
6	Projected Expenditure from 01.04.24-31.03.25	24.16			24.16	
	<b>Total</b>	<b>16,054.12</b>	<b>726.13</b>	<b>367.42</b>	<b>17,147.67</b>	

\* Capital cost includes FERV Loss upto domestic borrowing cost of total ₹667.26 Lakhs and FERV Loss above domestic borrowing cost (from memorandum of accounts) of ₹306.70 Lakhs.

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

The estimated expenditure in Sr. No 6 is based on management estimate.

For Bandyopadhyaya Bhaumik & Co.

**Sarbajit  
Ray**

Cost Accountants  
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 Sarbajit Ray  
 Date: 2024.09.13  
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(CMA SARBAJIT RAY)  
 PARTNER

Place:- Kolkata  
 Date:- 11.09.2024

FRN: 000041  
 M.No. 27784

UDIN: 2427784B26DXB7FVMU



*Handwritten signature*

**BANDYOPADHYAYA BHAUMIK & CO.**  
**COST ACCOUNTANTS**

12 Government Place East,  
Regent House, 2nd Floor,  
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Mob- 8287827749  
E mail: bbhco1994@gmail.com  
Website: bbcostaccountants.com

Certificate Ref. No. BB/ER-PGCIL-CERT/24-25/02 (A)

Dated: 11/09/2024

**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 Baharampur (POWERGRID)- Bheramara (Bangladesh) 2nd 400 KV D/C Line and Associated line bays at Baharampur Sub Station in Eastern Region-II of Power Grid Corporation of India Limited, which is commercial operation w.e.f. 27.07.2020 is detailed as under :*

(₹ in Lakhs)

S/N	Particulars	Land	Building and Civil Works	Tr. Line	Sub-Station	PLCC/Communication System excl. OPGW	I. T Equipment including software	Total
1	Expenditure upto 26.07.20 (DOCO)	0.00	0.00	14193.16	1274.30	211.71	100.18	15779.35
2	Expenditure from 27.07.20 -31.03.21	0.00	0.00	95.72	127.04	0.00	0.00	222.76
3	Expenditure from 01.04.21 - 31.03.22	0.00	0.00	57.44	748.50	0.00	0.00	805.94
4	Expenditure from 01.04.22-31.03.23	0.00	0.00	24.05	205.10	0.00	0.00	229.15
5	Expenditure from 01.04.23-31.03.24	0.00	0.00	0.00	86.31	0.00	0.00	86.31
6	Projected Expenditure from 01.04.24-31.03.25	0.00	0.00	0.00	24.16	0.00	0.00	24.16
	<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>14370.37</b>	<b>2465.41</b>	<b>211.71</b>	<b>100.18</b>	<b>17147.67</b>

S/N	Particulars	TL	Sub-station
1	Total Cost (Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of Civil works for the purpose of Initial Spares)	13396.73	2657.39
2	Initial Spares included above	350.02	99.31

For Bandyopadhyaya Bhaumik & Co.  
Cost Accountants

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**Sarbajit Ray**  
Date: 2024.09.13 12:22:46  
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(CMA SARBAJIT RAY)  
PARTNER

FRN: 000041

M.No. 27784

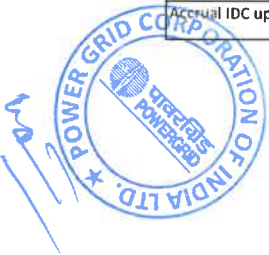
UDIN: 2427784B26DXB7FVMU

Place:- Kolkata  
Date:- 11.09.2024



**Statement showing IDC Discharged upto DOCO**

Statement showing IDC Discharged upto DOCO									
<b>Project:</b>	Baharampur (POWERGRID) – Bheramara (Bangladesh) 2nd 400kV D/c Transmission Line (Indian Portion)								
<b>Element:</b>	Baharampur (POWERGRID)- Bheramara (Bangladesh) 2nd 400 KV D/C Line and Associated line bays at Baharampur Sub Station								
<b>DOCO: Proposed</b>	27-Jul-20								
Loans	Amount	Interest Rate	Drawl Date	Total IDC	Annual Interest Payment Date upto DOCO	Interest Discharged upto DOCO	Annual Interest Payment Date after DOCO	IDC Discharged during 2020-2021	IDC Discharged during 2021-22
Bond LXIII	833.72	7.34%	15-Jul-19	63.26	15-Jul-20	61.24	15-Jul-21		2.01
SBI-04 (2018-2019) (Q4) (29.03.2019)	500.00	Floating	29-Mar-19	52.21	1-Jul-20	49.68	1-Aug-20	2.53	
SBI-04 (2019-2020) (Q1) (21.06.2019)	200.00	Floating	21-Jun-19	17.07	1-Jul-20	16.06	1-Aug-20	1.01	
KFW New (22.05.2019) (77.5761)	1317.02	Floating	22-May-19	18.53	15-May-20	15.87	15-Nov-20	2.66	
KFW New (04.09.2019) (79.3256)	1373.34	Floating	4-Sep-19	-	15-May-20	0.00	15-Nov-20		
KFW New (08.10.2019) (77.9676)	1481.56	Floating	8-Oct-19	-	15-May-20	0.00	15-Nov-20		
Sumitomo (Yen) (04.01.2019)	1297.19	Floating	4-Jan-19	211.35	6-Jul-20	208.62	Jan'21	2.73	
Sumitomo (Yen) (24.01.2019)	1077.30	Floating	24-Jan-19	-	6-Jul-20	0.00	Jan'21		
Sumitomo (Yen) (13.02.2019)	1077.30	Floating	13-Feb-19	-	6-Jul-20	0.00	Jan'21		
Sumitomo (Yen) (05.03.2019)	1077.30	Floating	5-Mar-19	-	6-Jul-20	0.00	Jan'21		
KFW New (22.09.2020) (85.9696) (IR Replacement)	452.03	Floating	22-Sep-20	-		0.00			
Bond LXVII	258.65	6.85%	15-Apr-20	5.00	15-Apr-20	0.00	15-Apr-21		5.00
HDFC-02 (2020-2021) (Q3) (04.12.2020) (IR Replacement)	100.14	Floating	4-Dec-20	-		0.00			
<b>Total</b>	<b>11045.54</b>			<b>367.42</b>		<b>351.46</b>		<b>8.94</b>	<b>7.01</b>
Total IDC as per Certificate	367.42								
IDC Discharged upto DOCO	346.07								
Accrual IDC upto DOCO (Discharged during 2020-2021)	14.34								
Accrual IDC upto DOCO (Discharged during 2021-2022)	7.01								



<b>Project Name</b>	<b>Baharampur (POWERGRID) – Bheramara (Bangladesh) 2nd 400kV D/c Transmission Line (Indian Portion)</b>										
<b>Region</b>	ER2										
<b>Actual DOCO</b>	7/27/2020		TR-201619-03-01								
<b>Loan (Foreign Currency)</b>	<b>KFW NEW</b>										
<b>Particulars</b>	<b>Drawl Date</b>	<b>Drawl Amount (Lakh FC)</b>	<b>Loan in Lakh EURO</b>	<b>Interest From</b>	<b>Interest Upto</b>	<b>Days</b>	<b>Rate</b>	<b>Interest (Lakh EURO)</b>	<b>Ex Rate</b>	<b>Interest (Lakh INR)</b>	<b>Undischarged on COD</b>
Drawl	22/May/19	14.85	14.85	22/May/19	15/Nov/19	177	0.2525%	0.02	78.9406	1.46	-
Drawl	4/Sep/19	15.48	15.48	4/Sep/19	15/Nov/19	72	0.0650%	0.00	78.9406	0.16	-
Drawl	8/Oct/19	16.70	16.70	8/Oct/19	15/Nov/19	38	0.0650%	0.00	78.9406	0.09	-
Opening			47.03	15/Nov/19	31/Mar/20	138	0.1275%	0.02	81.8250	1.88	-
Opening			47.03	1/Apr/20	15/May/20	44	0.1275%	0.01	81.8250	0.60	-
Opening			47.03	15/May/20	27/Jul/20	73	0.3150%	0.03	88.7000	2.66	2.66
		<b>47.03</b>								<b>6.85</b>	<b>2.66</b>
										<b>11.03</b>	
										<b>0.65</b>	
										<b>18.54</b>	



MS





**Liability Flow Statement**

Name of Petitioner POWERGRID CORPORATION OF INDIA LTD , ERTS II

Project Name: Baharampur (POWERGRID)- Bheramara (Bangladesh) 2nd 400 KV D/C Line and Associated line bays at Baharampur Sub Station

Asset- I: 400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line (INDIAN PORTION) bays at Baharampur sub-station

Asset No.	Headwise /Partywise	Particulars#	Year of Actual Capitalisation	Outstanding Liability as on COD/31st March 2014*	Discharge						Reversal	Works deferred for execution						Additional Liability Recognized						Outstanding Liability as on 31.3.2024		
					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)			
Asset - I	M/s ASSOCIATED POWER STRUCTUR & etc	TL	27.07.2020	177.21		95.72	57.44	24.05	-	177.21						-									-	-
	M/s ASSOCIATED POWER STRUCTUR & etc	SS	27.07.2020	1,191.11		127.04	748.50	205.10	86.31	1,166.95						-									-	24.16
										-						-									-	-
					<b>1,368.32</b>		<b>222.76</b>	<b>805.94</b>	<b>229.15</b>	<b>86.31</b>	<b>1,344.16</b>		-	-	-	-	-	-	-	-	-	-	-	-	-	-

422.80

Asset No.	Headwise /Partywise	Particulars#	Year of Actual Capitalisation	Outstanding Liability as on 31st March 2024*	Discharge						Reversal	Works deferred for execution						Additional Liability Recognized						Outstanding Liability as on 31.3.2024*		
					2024-25 (anticipated)					Total (24-29)		2024-25 (anticipated)	2024-25 (anticipated)					Total (24-29)	2019-20	2024-25 (anticipated)						Total (24-29)
Asset - I	M/s ASSOCIATED POWER STRUCTUR & etc	TL	27.07.2020	-						-						-									-	-
	M/s ASSOCIATED POWER STRUCTUR & etc	SS	27.07.2020	24.16	24.16					24.16						-									-	0.00
										-						-									-	-
					<b>24.16</b>	<b>24.16</b>	-	-	-	-	<b>24.16</b>		-	-	-	-	-	-	-	-	-	-	-	-	-	<b>0.00</b>



**Summary of Tariff**

Form No. - 1

ENCL 2

Name of the Transmission Licensee:	Power Grid Corporation of India Limited		
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO		
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station		
Region	Eastern Region	DOCO Date	Jul 27, 2020

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Year Days	0.00	365.00	365.00	365.00	366.00
Tariff Days	0.00	248.00	365.00	365.00	366.00
Depreciation-Form No. 10A	0.00	567.89	862.99	890.33	898.65
Interest on Loan-Form No. 9E	0.00	121.81	191.15	231.14	321.27
Return on Equity-Form No. 8	0.00	597.41	908.25	937.42	946.30
Int. on Working capital-Form No.11	0.00	22.16	31.50	32.97	39.50
Op. and maintenance-Form No.2	0.00	99.68	151.86	157.18	162.67
Total AFC	0.00	1,408.95	2,145.75	2,249.04	2,368.39

  
(Petitioner)

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

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTION)			
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station			
Region	Eastern Region	DOC Date	Jul 27, 2020	

**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 (02ND) BAHARAMPUR (POWERGRID) - BHERAMARA (BANGLADESH) LINE	AC	DC	2	400 KV	0.000	0.000	86.816	Jul 27, 2020	Y	
400KV D/C (02ND) BAHARAMPUR (POWERGRID) - BHERAMARA (BANGLADESH) LINE	AC	MC	2	400 KV	0.000	0.000	0.610	Jul 27, 2020	Y	

**Summary:**

O&M Expenses For the Transmission Lines Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
<b>DOUBLE CIRCUIT (TWIN CONDUCTOR)</b>					
Normative Rate of O&M as per Regulation	0.00	0.912	0.944	0.977	1.011
No. of Units - ( Length in KM )	0.00	86.816	86.816	86.816	86.816

O&M Claimed	0.00	53.80	81.95	84.82	87.77
<b>MULTICIRCUIT WITH TWO CONDUCTORS</b>					
Normative Rate of O&M as per Regulation	0.00	1.598	1.654	1.713	1.773
No. of Units - ( Length in KM )	0.00	0.61	0.61	0.61	0.61
O&M Claimed	0.00	0.66	1.01	1.04	1.08



## 2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transformers/ Reactor/ SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition	
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV		Yes/ No	If No, Petition No.
Behrampur:400KV LINE BAYS AT BAHARAMPUR	Conventional	400 KV			2.000							Jul 27, 2020	Y	

### Summary:

O&M Expenses For Substations Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
<b>400KV SUB-STATION</b>					
Normative Rate of O&M as per Regulation	0.00	33.28	34.45	35.66	36.91
No. of Units	0.00	2.00	2.00	2.00	2.00
O&M Claimed	0.00	45.22	68.90	71.32	73.82



*Handwritten signature*

Summary of O&M Expenses claim

(Amount in Rs. Lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
<b>A) Normative O&amp;M</b>					
Transmission Line	0.00	54.46	82.96	85.86	88.85
Substation	0.00	45.22	68.90	71.32	73.82
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	0.00	99.68	151.86	157.18	162.67
<b>B) O&amp;M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition )</b>					
*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	99.68	151.86	157.18	162.67

  
(Petitioner)



**Normative parameters considered for tariff computations**

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO		
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station		
Region	Eastern Region	DOCO Date	Jul 27, 2020

(Amount in Rs. Lakh)

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





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

(Petitioner)



**Financial Package upto COD**

Form No. - 6

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO		
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station		
Region	Eastern Region	DOC Date	Jul 27, 2020

(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	13,894.30	INR	10,844.91		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	5,954.70	INR	4,647.83		0.00
Total Equity	INR	5,954.70	INR	4,647.83		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	19,849.00	INR	15,492.74		0.00

Particulars	Debt	Equity	Total
Addcap for 2020 - 2021			223.51
Addcap for 2021 - 2022			805.94
Addcap for 2022 - 2023			229.15
Addcap for 2023 - 2024			86.32



Particulars	Actual	Normative	
<b>Addcap for 2020 - 2021</b>			
Equity		67.05	
Debt		156.46	
Total		223.51	
<b>Addcap for 2021 - 2022</b>			
Equity		241.78	
Debt		564.16	
Total		805.94	
<b>Addcap for 2022 - 2023</b>			
Equity		68.74	
Debt		160.41	
Total		229.15	
<b>Addcap for 2023 - 2024</b>			
Equity		25.90	
Debt		60.42	
Total		86.32	
<b>Total Capital cost with Addcap</b>		16,837.66	

*WA*

(Petitioner)



**Financing of Additional Capitalisation**

Form No. - 7A

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTION)			
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station			
Region	Eastern Region	DOC Date	Jul 27, 2020	

(Amount in Rs. Lakh)

Financial Year ( Starting of COD)	Actual/Projected					Admitted				
	2019-20	2020-21	2021-22	2022-23	2023-24	2019-20	2020-21	2021-22	2022-23	2023-24
Amount capitolized in Work/ Equipment										
Financing Details										
Total Loan	0.00	156.46	564.16	160.41	60.42					
Equity	0.00	67.05	241.78	68.74	25.90					
Total	0.00	223.51	805.94	229.15	86.32					



*[Signature]*  
(Petitioner)

### Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO		
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station		
Region	Eastern Region	DOCO Date	Jul 27, 2020

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the year	0.00	365.00	365.00	365.00	366.00
No. of days for which tariff claimed	0.00	248.00	365.00	365.00	366.00
Opening Normative Equity	0.00	4,647.83	4,714.88	4,956.66	5,025.40
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	4,647.83	4,714.88	4,956.66	5,025.40
Add: Increase in Equity due to addition during the year / period	0.00	-4.08	-2.10	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	71.13	243.88	68.74	25.90
Closing Normative Equity	0.00	4,714.88	4,956.66	5,025.40	5,051.30
Average Normative Equity	0.00	4,681.36	4,835.77	4,991.03	5,038.35
Rate of return on Equity (%)	0.00	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	0.00	15.50	15.50	15.50	15.50
MAT/Corporate Rate	0.00	17.472	17.472	17.472	17.472
Grossed up rate of ROE	0.00	18.782	18.782	18.782	18.782
Return on Equity	0.00	879.25	908.25	937.42	946.30
Pro rata return on Equity	0.00	597.41	908.25	937.42	946.30



**Calculation of WAR of interest on actual loan**

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO				
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station				
Region	Eastern Region	DOC Date	Jul 27, 2020		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>SBI-04 -ADDCAP_22_23</b>					
Gross Loan- Opening	0.00	0.00	0.00	0.00	37.60
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	3.55	3.55
Net loan-Opening	0.00	0.00	0.00	0.00	34.05
Add: Drawl(s) during the year	0.00	0.00	0.00	37.60	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	3.76
Net Loan-Closing	0.00	0.00	0.00	37.60	30.29
Average Net Loan	0.00	0.00	0.00	18.80	32.17
Rate of Interest on Loan on Annual Basis	0.00	6.692859	6.65	7.225616	8.126549
Interest on loan	0.00	0.00	0.00	1.3584	2.6143

<b>SBI-04 -ADDCAP_23_24</b>					
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	5.57
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	58.96
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	5.90
Net Loan-Closing	0.00	0.00	0.00	0.00	53.06



Average Net Loan	0.00	0.00	0.00	0.00	26.53
Rate of Interest on Loan on Annual Basis	0.00	6.692859	6.65	7.225616	8.126549
Interest on loan	0.00	0.00	0.00	0.00	2.156

#### SBI-04 -DOCO LOAN

Gross Loan- Opening	0.00	700.00	700.00	700.00	700.00
Cumulative repayments of Loans upto previous year	0.00	0.00	63.00	66.08	66.08
Net loan-Opening	0.00	700.00	637.00	633.92	633.92
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	63.00	3.08	0.00	70.00
Net Loan-Closing	0.00	637.00	633.92	633.92	563.92
Average Net Loan	0.00	668.50	635.46	633.92	598.92
Rate of Interest on Loan on Annual Basis	0.00	6.692859	6.65	7.225616	8.126549
Interest on loan	0.00	44.7418	42.2581	45.8046	48.6715

#### SUMITOMO MITSUI JPY -DOCO LOAN

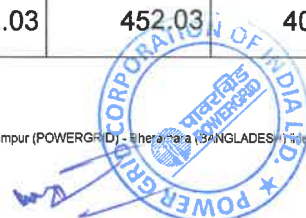
Gross Loan- Opening	0.00	4,529.09	4,529.09	4,529.09	4,529.09
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	4,529.09	4,529.09	4,529.09	4,529.09
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	4,529.09	4,529.09	4,529.09	4,529.09
Average Net Loan	0.00	4,529.09	4,529.09	4,529.09	4,529.09
Rate of Interest on Loan on Annual Basis	0.00	1.0366	1.0366	1.0366	1.037955
Interest on loan	0.00	46.9485	46.9485	46.9485	47.0099



<b>Bond - LXIII -DOCO LOAN</b>					
Gross Loan- Opening	0.00	833.72	833.72	833.72	833.72
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	833.72	833.72	833.72	833.72
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	833.72	833.72	833.72	833.72
Average Net Loan	0.00	833.72	833.72	833.72	833.72
Rate of Interest on Loan on Annual Basis	0.00	7.34	7.34	7.34	7.34
Interest on loan	0.00	61.195	61.195	61.195	61.195

<b>KFW NEW -DOCO LOAN</b>					
Gross Loan- Opening	0.00	4,171.92	4,171.92	4,171.92	4,171.92
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	397.32
Net loan-Opening	0.00	4,171.92	4,171.92	4,171.92	3,774.60
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	397.32	397.32
Net Loan-Closing	0.00	4,171.92	4,171.92	3,774.60	3,377.28
Average Net Loan	0.00	4,171.92	4,171.92	3,973.26	3,575.94
Rate of Interest on Loan on Annual Basis	0.00	0.132599	0.315	1.121667	4.10854
Interest on loan	0.00	5.5319	13.1415	44.5667	146.9189

<b>KFW NEW -DOCO LOAN</b>					
Gross Loan- Opening	0.00	452.03	452.03	452.03	452.03
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	43.05
Net loan-Opening	0.00	452.03	452.03	452.03	408.98





Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	43.05	43.05
Net Loan-Closing	0.00	452.03	452.03	408.98	365.93
Average Net Loan	0.00	452.03	452.03	430.51	387.46
Rate of Interest on Loan on Annual Basis	0.00	0.132599	0.315	1.121667	4.10854
Interest on loan	0.00	0.5994	1.4239	4.8289	15.9189

#### BOND LXVII -DOCO LOAN

Gross Loan- Opening	0.00	258.65	258.65	258.65	258.65
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	258.65	258.65	258.65	258.65
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	258.65	258.65	258.65	258.65
Average Net Loan	0.00	258.65	258.65	258.65	258.65
Rate of Interest on Loan on Annual Basis	0.00	6.85	6.85	6.85	6.85
Interest on loan	0.00	17.7175	17.7175	17.7175	17.7175

#### HDFC (Rs.5000 Cr.) -ACCRUAL\_IDC\_20\_21

Gross Loan- Opening	0.00	0.00	10.04	10.04	10.04
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	5.07	5.07
Net loan-Opening	0.00	0.00	10.04	4.97	4.97
Add: Drawl(s) during the year	0.00	10.04	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	5.07	0.00	0.00
Net Loan-Closing	0.00	10.04	4.97	4.97	4.97
Average Net Loan	0.00	5.02	7.51	4.97	4.97



Rate of Interest on Loan on Annual Basis	0.00	5.95	5.95	7.315205	8.10
Interest on loan	0.00	0.2987	0.4468	0.3636	0.4026

#### HDFC (Rs.5000 Cr.) -ACCRUAL\_IDC\_21\_22

Gross Loan- Opening	0.00	0.00	0.00	4.91	4.91
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	2.48	2.48
Net loan-Opening	0.00	0.00	0.00	2.43	2.43
Add: Drawl(s) during the year	0.00	0.00	4.91	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	2.48	0.00	0.00
Net Loan-Closing	0.00	0.00	2.43	2.43	2.43
Average Net Loan	0.00	0.00	1.22	2.43	2.43
Rate of Interest on Loan on Annual Basis	0.00	5.95	5.95	7.315205	8.10
Interest on loan	0.00	0.00	0.0726	0.1778	0.1968

#### HDFC (Rs.5000 Cr.) -ADDCAP\_20\_21

Gross Loan- Opening	0.00	0.00	155.93	155.93	155.93
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	78.78	78.78
Net loan-Opening	0.00	0.00	155.93	77.15	77.15
Add: Drawl(s) during the year	0.00	155.93	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	78.78	0.00	0.00
Net Loan-Closing	0.00	155.93	77.15	77.15	77.15
Average Net Loan	0.00	77.97	116.54	77.15	77.15
Rate of Interest on Loan on Annual Basis	0.00	5.95	5.95	7.315205	8.10
Interest on loan	0.00	4.6392	6.9341	5.6437	6.2492

#### HDFC (Rs.5000 Cr.) -ADDCAP\_22\_23



Gross Loan- Opening	0.00	0.00	0.00	0.00	49.98
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	25.25	25.25
Net loan-Opening	0.00	0.00	0.00	0.00	24.73
Add: Drawl(s) during the year	0.00	0.00	0.00	49.98	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	49.98	24.73
Average Net Loan	0.00	0.00	0.00	24.99	24.73
Rate of Interest on Loan on Annual Basis	0.00	5.95	5.95	7.315205	8.10
Interest on loan	0.00	0.00	0.00	1.8281	2.0031

#### HDFC (Rs.5000 Cr.) -DOCO LOAN

Gross Loan- Opening	0.00	85.19	85.19	85.19	85.19
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	43.04	43.04
Net loan-Opening	0.00	85.19	85.19	42.15	42.15
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	43.04	0.00	0.00
Net Loan-Closing	0.00	85.19	42.15	42.15	42.15
Average Net Loan	0.00	85.19	63.67	42.15	42.15
Rate of Interest on Loan on Annual Basis	0.00	5.95	5.95	7.315205	8.10
Interest on loan	0.00	5.0688	3.7884	3.0834	3.4142

#### BOND LXIX (69) -ADDCAP\_21\_22

Gross Loan- Opening	0.00	0.00	0.00	564.16	564.16
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	564.16	564.16
Add: Drawl(s) during the year	0.00	0.00	564.16	0.00	0.00



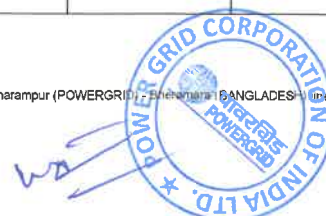
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	564.16	564.16	564.16
Average Net Loan	0.00	0.00	282.08	564.16	564.16
Rate of Interest on Loan on Annual Basis	0.00	6.05	6.05	6.05	6.05
Interest on loan	0.00	0.00	17.0658	34.1317	34.1317

#### Canara-01 -ADDCAP\_22\_23

Gross Loan- Opening	0.00	0.00	0.00	0.00	72.83
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	72.83
Add: Drawl(s) during the year	0.00	0.00	0.00	72.83	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	7.28
Net Loan-Closing	0.00	0.00	0.00	72.83	65.55
Average Net Loan	0.00	0.00	0.00	36.42	69.19
Rate of Interest on Loan on Annual Basis	0.00	8.15	8.15	7.634924	8.15
Interest on loan	0.00	0.00	0.00	2.7806	5.639

#### BOND LXXII (72) -ADDCAP\_23\_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	1.46
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.11
Net Loan-Closing	0.00	0.00	0.00	0.00	1.35
Average Net Loan	0.00	0.00	0.00	0.00	0.68
Rate of Interest on Loan on Annual Basis	0.00	7.56	7.56	7.56	7.56



Interest on loan	0.00	0.00	0.00	0.00	0.0514
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**Summary**

Gross Loan- Opening	0.00	11,030.60	11,196.57	11,765.64	11,926.05
Cumulative repayments of Loans upto previous year	0.00	0.00	63.00	224.25	670.19
Net loan-Opening	0.00	11,030.60	11,133.57	11,570.19	11,261.43
Add: Drawl(s) during the year	0.00	165.97	569.07	160.41	60.42
Less: Repayment(s) of loan during the year	0.00	63.00	132.45	440.37	527.42
Net Loan-Closing	0.00	11,133.57	11,570.19	11,290.23	10,794.43
Average Net Loan	0.00	11,082.09	11,351.89	11,430.22	11,027.94
Rate of Interest on Loan on Annual Basis	0.00	1.6851	1.8587	2.3659	3.5754
Interest on loan	0.00	186.7408	210.9922	270.4285	394.29

*[Handwritten signature]*

(Petitioner)



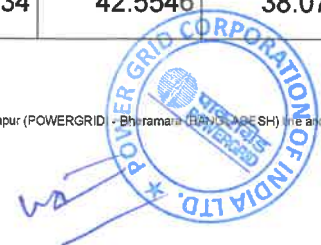
**Loans in Foreign Currency**

Form No. - 9D

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO		
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station		
Region	Eastern Region	DOCOC Date	Jul 27, 2020

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>SUMITOMO MITSUI JPY -DOCOC LOAN -JPY</b>					
Gross Loan-Opening	0.00	6,306.164	6,306.164	6,306.164	6,306.164
Cumulative repayments of loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net Loans-Opening	0.00	6,306.164	6,306.164	6,306.164	6,306.164
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	6,306.164	6,306.164	6,306.164	6,306.164
Average Net Loan	0.00	6,306.164	6,306.164	6,306.164	6,306.164
Rate of interest on Loan on Annual Basis	0.00	1.0366	1.0366	1.0366	1.037955
Interest on loan	0.00	65.369696	65.369696	65.369696	65.455145

<b>KFW NEW -DOCOC LOAN -EUR</b>					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Loan-Opening	0.00	47.034	47.034	47.034	47.034
Cumulative repayments of loans upto previous year	0.00	0.00	0.00	0.00	4.4794
Net Loans-Opening	0.00	47.034	47.034	47.034	42.5546
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	4.4794	4.4794
Net Loan-Closing	0.00	47.034	47.034	42.5546	38.0752



Average Net Loan	0.00	47.034	47.034	44.7943	40.3149
Rate of interest on Loan on Annual Basis	0.00	0.132599	0.315	1.121667	4.10854
Interest on loan	0.00	0.062367	0.148157	0.502443	1.656354

<b>KFW NEW -DOCO LOAN -EUR</b>					
Gross Loan-Opening	0.00	5.258	5.258	5.258	5.258
Cumulative repayments of loans upto previous year	0.00	0.00	0.00	0.00	0.5008
Net Loans-Opening	0.00	5.258	5.258	5.258	4.7572
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	0.5008	0.5008
Net Loan-Closing	0.00	5.258	5.258	4.7572	4.2564
Average Net Loan	0.00	5.258	5.258	5.0076	4.5068
Rate of interest on Loan on Annual Basis	0.00	0.132599	0.315	1.121667	4.10854
Interest on loan	0.00	0.006972	0.016563	0.056169	0.185164

*[Handwritten Signature]*

(Petitioner)



**Calculation of interest on Normative loan**

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO				
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station				
Region	Eastern Region	DOC Date	Jul 27, 2020		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the Year	0.00	365.00	365.00	365.00	366.00
No. of days for which Tariff claimed	0.00	248.00	365.00	365.00	366.00
Gross normative loan-Opening	0.00	10,844.91	11,001.37	11,565.53	11,725.94
Cumulative repayments of Normative loan upto previous year	0.00	0.00	567.89	1,430.88	2,321.21
Net normative loan-Opening	0.00	10,844.91	10,433.48	10,134.65	9,404.73
Addition in normative loan towards the ACE	0.00	156.46	564.16	160.41	60.42
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	567.89	862.99	890.33	898.65
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	10,433.48	10,134.65	9,404.73	8,566.50
Average normative loan	0.00	10,639.20	10,284.07	9,769.69	8,985.62
Weighted Average Rate of interest on actual loan	0.00	1.6851	1.8587	2.3659	3.5754
Interest on normative loan	0.00	179.28	191.15	231.14	321.27
Pro rata interest on normative loan	0.00	121.81	191.15	231.14	321.27

(Petitioner)





**Calculation of Depreciation Rate on Original Project Cost**

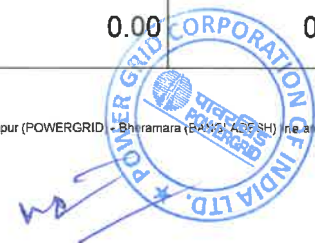
Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO		
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station		
Region	Eastern Region	DOCO Date	Jul 27, 2020

(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
<b>2020-21</b>						
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	13,913.42	96.40	14,009.82	13,961.62	5.28	500.87
Sub Station	1,268.78	127.10	1,395.88	1,332.33	5.28	47.80
Comm. Sys. excluding Fiber Optic	210.79	0.01	210.80	210.80	6.33	9.06
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	99.75	0.00	99.75	99.75	15.00	10.16
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
<b>TOTAL</b>	<b>15,492.74</b>	<b>223.51</b>	<b>15,716.25</b>	<b>15,604.50</b>	<b>0.00</b>	<b>567.89</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>3.639271</b>	

<b>2021-22</b>						
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	14,009.82	57.44	14,067.26	14,038.54	5.28	741.23
Sub Station	1,395.88	748.50	2,144.38	1,770.13	5.28	93.46
Comm. Sys. excluding Fiber Optic	210.80	0.00	210.80	210.80	6.33	13.34
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	99.75	0.00	99.75	99.75	15.00	14.96
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
<b>TOTAL</b>	<b>15,716.25</b>	<b>805.94</b>	<b>16,522.19</b>	<b>16,119.22</b>	<b>0.00</b>	<b>862.99</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.353795</b>	

<b>2022-23</b>						
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	14,067.26	24.05	14,091.31	14,079.29	5.28	743.39
Sub Station	2,144.38	205.10	2,349.48	2,246.93	5.28	118.64
Comm. Sys. excluding Fiber Optic	210.80	0.00	210.80	210.80	6.33	13.34
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	99.75	0.00	99.75	99.75	15.00	14.96
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
<b>TOTAL</b>	<b>16,522.19</b>	<b>229.15</b>	<b>16,751.34</b>	<b>16,636.77</b>	<b>0.00</b>	<b>890.33</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.35158</b>	



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	14,091.31	0.00	14,091.31	14,091.31	5.28	744.02
Sub Station	2,349.48	86.32	2,435.80	2,392.64	5.28	126.33
Comm. Sys. excluding Fiber Optic	210.80	0.00	210.80	210.80	6.33	13.34
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	99.75	0.00	99.75	99.75	15.00	14.96
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
<b>TOTAL</b>	<b>16,751.34</b>	<b>86.32</b>	<b>16,837.66</b>	<b>16,794.50</b>	<b>0.00</b>	<b>898.65</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.350859</b>	

(Petitioner)



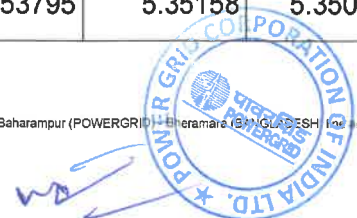
**Statement of Depreciation**

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO				
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station				
Region	Eastern Region	DOC Date	Jul 27, 2020		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	0.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	0.00	248.00	365.00	365.00	366.00
<b>Life at the beginning of the year</b>					
1.1 Weighted Average useful life of the Asset/ Project	0.00	34.00	34.00	34.00	34.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	0.00	0.00	1.00	2.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	34.00	34.00	33.00	32.00
<b>Capital Base</b>					
1.4 Opening capital cost	0.00	15,492.74	15,716.25	16,522.19	16,751.34
1.5 Additional Capital Expenditure dr. the year	0.00	223.51	805.94	229.15	86.32
1.6 De-Capitalisation During the year	0.00	0.00	0.00	0.00	0.00
1.7 Closing capital cost	0.00	15,716.25	16,522.19	16,751.34	16,837.66
1.8 Average capital cost	0.00	15,604.50	16,119.22	16,636.77	16,794.50
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	99.75	99.75	99.75	99.75
1.11 Asset having 10% salvage value included in 1.8	0.00	15,504.75	16,019.47	16,537.02	16,694.75
1.12 Depreciable Value(1.10+90% of 1.11)	0.00	14,054.03	14,517.28	14,983.07	15,125.03
<b>Depreciation for the period and Cum. Depreciation</b>					
1.13 Weighted Average Rate of depreciation	0.00	3.639271	5.353795	5.35158	5.350859



1.14 Depreciation(for the period)	0.00	567.89	862.99	890.33	898.65
1.15 Depreciation(Annualised)	0.00	567.89	862.99	890.33	898.65
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	567.89	1,430.88	2,321.21
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	567.89	1,430.88	2,321.21	3,219.86

(Petitioner)



**Calculation of interest on working Capital**

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO		
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station		
Region	Eastern Region	DOCO Date	Jul 27, 2020

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	0.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	0.00	248.00	365.00	365.00	366.00
O&M Expenses-one month	0.00	12.23	12.66	13.10	13.56
Maintenance spares 15% of O&M Expenses	0.00	22.01	22.78	23.58	24.40
Receivables equivalent to 45 days of AFC	0.00	255.66	264.54	277.28	291.20
Total Working capital	0.00	289.90	299.98	313.96	329.16
Bank Rate as on 01.04.2019 or as on 01st April of the COD year, whichever is later.	0.00	11.25	10.50	10.50	12.00
Interest on working capital	0.00	32.61	31.50	32.97	39.50
Pro rata interest on working capital	0.00	22.16	31.50	32.97	39.50

  
(Petitioner)

**Summary of Tariff**

Form No. - 1

ENCL 4

Name of the Transmission Licensee:	Power Grid Corporation of India Limited		
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO		
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station		
Region	Eastern Region	DOCOC Date	Jul 27, 2020

(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	919.85	920.49	920.32	905.53	888.07
Interest on Loan-Form No. 9E	295.13	249.00	209.42	181.24	160.76
Return on Equity-Form No. 8	949.42	950.10	950.10	950.10	950.10
Int. on Working capital-Form No.11	38.03	37.67	37.39	37.00	36.88
Op. and maintenance-Form No.2	134.73	141.79	149.18	157.01	165.27
Total AFC	2,337.16	2,299.05	2,266.41	2,230.88	2,201.08

  
(Petitioner)

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

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTION)			
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station			
Region	Eastern Region	DOC Date	Jul 27, 2020	

**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 (02ND) BAHARAMPUR (POWERGRID) - BHERAMARA (BANGLADESH) LINE	AC	DC	2	400 KV	0.000	0.000	86.816	Jul 27, 2020	Y	
400KV D/C (02ND) BAHARAMPUR (POWERGRID) - BHERAMARA (BANGLADESH) LINE	AC	MC	2	400 KV	0.000	0.000	0.610	Jul 27, 2020	Y	

**Summary:**

O&M Expenses For the Transmission Lines Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
<b>DOUBLE CIRCUIT (TWIN CONDUCTOR)</b>					
Normative Rate of O&M as per Regulation	0.861	0.906	0.953	1.003	1.056
No. of Units - ( Length in KM )	86.816	86.816	86.816	86.816	86.816





O&M Claimed	74.75	78.66	82.74	87.08	91.68
<b>MULTICIRCUIT WITH TWO CONDUCTORS</b>					
Normative Rate of O&M as per Regulation	1.509	1.588	1.671	1.759	1.851
No. of Units - ( Length in KM )	0.61	0.61	0.61	0.61	0.61
O&M Claimed	0.92	0.97	1.02	1.07	1.13

*WS*



## 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		Ye s/ No	If No, Petitio n No.
Behrampur:400KV LINE BAYS AT BAHARAMPUR	Conventio nal	400 KV			2.000							Jul 27, 2020	Y	

### Summary:

O&M Expenses For Substations Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
<b>400KV SUB-STATION</b>					
Normative Rate of O&M as per Regulation	29.53	31.08	32.71	34.43	36.23
No. of Units	2.00	2.00	2.00	2.00	2.00
O&M Claimed	59.06	62.16	65.42	68.86	72.46



Summary of O&M Expenses claim

(Amount in Rs. Lakh)

Particular	2024-25	2025-26	2026-27	2027-28	2028-29
<b>A) Normative O&amp;M</b>					
Transmission Line	75.67	79.63	83.76	88.15	92.81
Substation	59.06	62.16	65.42	68.86	72.46
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	134.73	141.79	149.18	157.01	165.27
<b>B) O&amp;M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition )</b>					
*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	134.73	141.79	149.18	157.01	165.27

(Petitioner)



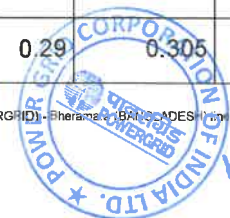
**Normative parameters considered for tariff computations**

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO		
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station		
Region	Eastern Region	DOCO Date	Jul 27, 2020

(Amount in Rs. Lakh)

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



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

  
 (Petitioner)



**Financial Package upto COD**

Form No. - 6

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO		
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station		
Region	Eastern Region	DOCOC Date	Jul 27, 2020

(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	13,894.30	INR	11,786.36		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	5,954.70	INR	5,051.30		0.00
Total Equity	INR	5,954.70	INR	5,051.30		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	19,849.00	INR	16,837.66		0.00

Particulars	Debt	Equity	Total
Addcap for 2024 - 2025			24.16
Addcap for 2025 - 2026			0.00
Addcap for 2026 - 2027			0.00
Addcap for 2027 - 2028			0.00



Addcap for 2028 - 2029			0.00	
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Particulars	Actual	Normative	
<b>Addcap for 2024 - 2025</b>			
Equity		7.25	
Debt		16.91	
Total		24.16	
<b>Addcap for 2025 - 2026</b>			
Equity		0.00	
Debt		0.00	
Total		0.00	
<b>Addcap for 2026 - 2027</b>			
Equity		0.00	
Debt		0.00	
Total		0.00	
<b>Addcap for 2027 - 2028</b>			
Equity		0.00	
Debt		0.00	
Total		0.00	
<b>Addcap for 2028 - 2029</b>			
Equity		0.00	
Debt		0.00	
Total		0.00	
<b>Total Capital cost with Addcap</b>		16,861.82	



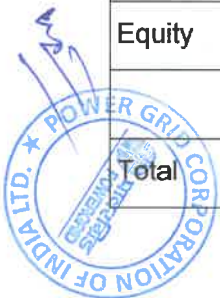
**Financing of Additional Capitalisation**

Form No. - 7A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTION)		
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station		
Region	Eastern Region	DOC Date	Jul 27, 2020

(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
<b>Amount capitalized in Work/ Equipment</b>										
<b>Financing Details</b>										
Total Loan	16.91	0.00	0.00	0.00	0.00					
Equity	7.25	0.00	0.00	0.00	0.00					
<b>Total</b>	<b>24.16</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>					



(Petitioner)



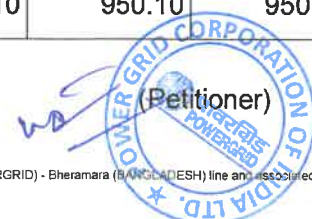
### Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO				
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station				
Region	Eastern Region	DOC Date	Jul 27, 2020		

(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	5,051.30	5,058.55	5,058.55	5,058.55	5,058.55
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)	5,051.30	5,058.55	5,058.55	5,058.55	5,058.55
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	7.25	0.00	0.00	0.00	0.00
Closing Normative Equity	5,058.55	5,058.55	5,058.55	5,058.55	5,058.55
Average Normative Equity	5,054.93	5,058.55	5,058.55	5,058.55	5,058.55
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	949.42	950.10	950.10	950.10	950.10
Pro rata return on Equity	949.42	950.10	950.10	950.10	950.10



**Calculation of WAR of interest on actual loan**

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO				
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station				
Region	Eastern Region	DOC Date	Jul 27, 2020		

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
<b>SBI-04 -ADDCAP_22_23</b>					
Gross Loan- Opening	37.60	37.60	37.60	37.60	37.60
Cumulative repayments of Loans upto previous year	7.31	11.07	14.83	18.59	22.35
Net loan-Opening	30.29	26.53	22.77	19.01	15.25
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	3.76	3.76	3.76	3.76	3.76
Net Loan-Closing	26.53	22.77	19.01	15.25	11.49
Average Net Loan	28.41	24.65	20.89	17.13	13.37
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	2.3296	2.0213	1.713	1.4047	1.0963

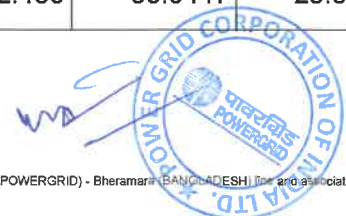
<b>SBI-04 -ADDCAP_23_24</b>					
Gross Loan- Opening	58.96	58.96	58.96	58.96	58.96
Cumulative repayments of Loans upto previous year	11.46	17.36	23.25	29.15	35.05
Net loan-Opening	47.50	41.60	35.71	29.81	23.91
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	5.90	5.90	5.90	5.90	5.90
Net Loan-Closing	41.60	35.70	29.81	23.91	18.01



Average Net Loan	44.55	38.65	32.76	26.86	20.96
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	3.6531	3.1693	2.6863	2.2025	1.7187

<b>SBI-04 -DOCO LOAN</b>					
Gross Loan- Opening	700.00	700.00	700.00	700.00	700.00
Cumulative repayments of Loans upto previous year	136.08	206.08	276.08	346.08	416.08
Net loan-Opening	563.92	493.92	423.92	353.92	283.92
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	70.00	70.00	70.00	70.00	70.00
Net Loan-Closing	493.92	423.92	353.92	283.92	213.92
Average Net Loan	528.92	458.92	388.92	318.92	248.92
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	43.3714	37.6314	31.8914	26.1514	20.4114

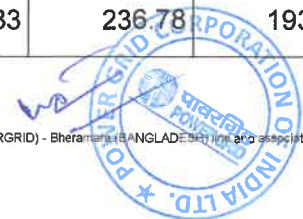
<b>SUMITOMO MITSUI JPY -DOCO LOAN</b>					
Gross Loan- Opening	4,529.09	4,529.09	4,529.09	4,529.09	4,529.09
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	905.82	1,811.63
Net loan-Opening	4,529.09	4,529.09	4,529.09	3,623.27	2,717.46
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	905.82	905.82	905.82
Net Loan-Closing	4,529.09	4,529.09	3,623.27	2,717.45	1,811.64
Average Net Loan	4,529.09	4,529.09	4,076.18	3,170.36	2,264.55
Rate of Interest on Loan on Annual Basis	1.0423	1.0423	1.0423	1.0423	1.0423
Interest on loan	47.2067	47.2067	42.486	33.0447	23.6034



<b>Bond - LXIII -DOCO LOAN</b>					
Gross Loan- Opening	833.72	833.72	833.72	833.72	833.72
Cumulative repayments of Loans upto previous year	0.00	277.91	277.91	277.91	277.91
Net loan-Opening	833.72	555.81	555.81	555.81	555.81
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	277.91	0.00	0.00	0.00	0.00
Net Loan-Closing	555.81	555.81	555.81	555.81	555.81
Average Net Loan	694.77	555.81	555.81	555.81	555.81
Rate of Interest on Loan on Annual Basis	7.34	7.34	7.34	7.34	7.34
Interest on loan	50.9961	40.7965	40.7965	40.7965	40.7965

<b>KFW NEW -DOCO LOAN</b>					
Gross Loan- Opening	4,171.92	4,171.92	4,171.92	4,171.92	4,171.92
Cumulative repayments of Loans upto previous year	794.65	1,191.98	1,589.30	1,986.62	2,383.95
Net loan-Opening	3,377.27	2,979.94	2,582.62	2,185.30	1,787.97
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	397.32	397.32	397.32	397.32	397.32
Net Loan-Closing	2,979.95	2,582.62	2,185.30	1,787.98	1,390.65
Average Net Loan	3,178.61	2,781.28	2,383.96	1,986.64	1,589.31
Rate of Interest on Loan on Annual Basis	4.565	4.565	4.565	4.565	4.565
Interest on loan	145.1035	126.9654	108.8278	90.6901	72.552

<b>KFW NEW -DOCO LOAN</b>					
Gross Loan- Opening	452.03	452.03	452.03	452.03	452.03
Cumulative repayments of Loans upto previous year	86.10	129.15	172.20	215.25	258.31
Net loan-Opening	365.93	322.88	279.83	236.78	193.72



Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	43.05	43.05	43.05	43.05	43.05
Net Loan-Closing	322.88	279.83	236.78	193.73	150.67
Average Net Loan	344.41	301.36	258.31	215.26	172.20
Rate of Interest on Loan on Annual Basis	4.565	4.565	4.565	4.565	4.565
Interest on loan	15.7223	13.7571	11.7919	9.8266	7.8609

### BOND LXVII -DOCO LOAN

Gross Loan- Opening	258.65	258.65	258.65	258.65	258.65
Cumulative repayments of Loans upto previous year	0.00	0.00	258.65	258.65	258.65
Net loan-Opening	258.65	258.65	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	258.65	0.00	0.00	0.00
Net Loan-Closing	258.65	0.00	0.00	0.00	0.00
Average Net Loan	258.65	129.33	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	6.85	6.85	6.85	6.85	6.85
Interest on loan	17.7175	8.8591	0.00	0.00	0.00

### HDFC (Rs.5000 Cr.) -ACCRUAL\_IDC\_20\_21

Gross Loan- Opening	10.04	10.04	10.04	10.04	10.04
Cumulative repayments of Loans upto previous year	5.07	5.07	5.07	5.57	6.07
Net loan-Opening	4.97	4.97	4.97	4.47	3.97
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.50	0.50	0.50
Net Loan-Closing	4.97	4.97	4.47	3.97	3.47
Average Net Loan	4.97	4.97	4.72	4.22	3.72



Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	0.4026	0.4026	0.3823	0.3418	0.3013

#### HDFC (Rs.5000 Cr.) -ACCRUAL\_IDC\_21\_22

Gross Loan- Opening	4.91	4.91	4.91	4.91	4.91
Cumulative repayments of Loans upto previous year	2.48	2.48	2.48	2.72	2.97
Net loan-Opening	2.43	2.43	2.43	2.19	1.94
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.24	0.24	0.24
Net Loan-Closing	2.43	2.43	2.19	1.95	1.70
Average Net Loan	2.43	2.43	2.31	2.07	1.82
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	0.1968	0.1968	0.1871	0.1677	0.1474

#### HDFC (Rs.5000 Cr.) -ADDCAP\_20\_21

Gross Loan- Opening	155.93	155.93	155.93	155.93	155.93
Cumulative repayments of Loans upto previous year	78.78	78.78	78.78	86.49	94.21
Net loan-Opening	77.15	77.15	77.15	69.44	61.72
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	7.72	7.72	7.72
Net Loan-Closing	77.15	77.15	69.43	61.72	54.00
Average Net Loan	77.15	77.15	73.29	65.58	57.86
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	6.2492	6.2492	5.9365	5.312	4.6867

#### HDFC (Rs.5000 Cr.) -ADDCAP\_22\_23



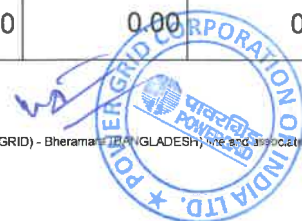
Gross Loan- Opening	49.98	49.98	49.98	49.98	49.98
Cumulative repayments of Loans upto previous year	25.25	25.25	25.25	27.72	30.20
Net loan-Opening	24.73	24.73	24.73	22.26	19.78
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	2.47	2.47	2.47
Net Loan-Closing	24.73	24.73	22.26	19.79	17.31
Average Net Loan	24.73	24.73	23.50	21.03	18.55
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	2.0031	2.0031	1.9035	1.7034	1.5026

#### HDFC (Rs.5000 Cr.) -DOCO LOAN

Gross Loan- Opening	85.19	85.19	85.19	85.19	85.19
Cumulative repayments of Loans upto previous year	43.04	43.04	43.04	47.25	51.47
Net loan-Opening	42.15	42.15	42.15	37.94	33.72
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	4.22	4.22	4.22
Net Loan-Closing	42.15	42.15	37.93	33.72	29.50
Average Net Loan	42.15	42.15	40.04	35.83	31.61
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	3.4142	3.4142	3.2432	2.9022	2.5604

#### BOND LXIX (69) -ADDCAP\_21\_22

Gross Loan- Opening	564.16	564.16	564.16	564.16	564.16
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	564.16	564.16
Net loan-Opening	564.16	564.16	564.16	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	564.16	0.00	0.00
Net Loan-Closing	564.16	564.16	0.00	0.00	0.00
Average Net Loan	564.16	564.16	282.08	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	34.1317	34.1317	17.0658	0.00	0.00

#### Canara-01 -ADDCAP\_22\_23

Gross Loan- Opening	72.83	72.83	72.83	72.83	72.83
Cumulative repayments of Loans upto previous year	7.28	10.92	18.21	25.49	32.77
Net loan-Opening	65.55	61.91	54.62	47.34	40.06
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	3.64	7.28	7.28	7.28	7.28
Net Loan-Closing	61.91	54.63	47.34	40.06	32.78
Average Net Loan	63.73	58.27	50.98	43.70	36.42
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	5.194	4.749	4.1549	3.5616	2.9682

#### BOND LXXII (72) -ADDCAP\_23\_24

Gross Loan- Opening	1.46	1.46	1.46	1.46	1.46
Cumulative repayments of Loans upto previous year	0.11	0.26	0.40	0.55	0.69
Net loan-Opening	1.35	1.20	1.06	0.91	0.77
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.15	0.15	0.15	0.15	0.15
Net Loan-Closing	1.20	1.05	0.91	0.76	0.62
Average Net Loan	1.28	1.13	0.99	0.84	0.70
Rate of Interest on Loan on Annual Basis	7.56	7.56	7.56	7.56	7.56






Interest on loan	0.0968	0.0854	0.0748	0.0635	0.0529
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**Summary**

Gross Loan- Opening	11,986.47	11,986.47	11,986.47	11,986.47	11,986.47
Cumulative repayments of Loans upto previous year	1,197.61	1,999.35	2,785.45	4,798.02	6,246.47
Net loan-Opening	10,788.86	9,987.12	9,201.02	7,188.45	5,740.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	801.73	786.11	2,012.59	1,448.43	1,448.43
Net Loan-Closing	9,987.13	9,201.01	7,188.43	5,740.02	4,291.57
Average Net Loan	10,388.01	9,594.08	8,194.74	6,464.25	5,015.80
Rate of Interest on Loan on Annual Basis	3.6368	3.4567	3.3331	3.375	3.5938
Interest on loan	377.7886	331.6388	273.141	218.1687	180.2587

  
(Petitioner)



**Loans in Foreign Currency**

Form No. - 9D

Name of the Transmission Licensee		Power Grid Corporation of India Limited			
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO				
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station				
Region	Eastern Region	DOC Date	Jul 27, 2020		

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
<b>SUMITOMO MITSUI JPY -DOC LOAN -JPY</b>					
Gross Loan-Opening	6,306.164	6,306.164	6,306.164	6,306.164	6,306.164
Cumulative repayments of loans upto previous year	0.00	0.00	0.00	1,261.2328	2,522.4656
Net Loans-Opening	6,306.164	6,306.164	6,306.164	5,044.9312	3,783.6984
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	1,261.2328	1,261.2328	1,261.2328
Net Loan-Closing	6,306.164	6,306.164	5,044.9312	3,783.6984	2,522.4656
Average Net Loan	6,306.164	6,306.164	5,675.5476	4,414.3148	3,153.082
Rate of interest on Loan on Annual Basis	1.0423	1.0423	1.0423	1.0423	1.0423
Interest on loan	65.729147	65.729147	59.156233	46.010403	32.864574

<b>KFW NEW -DOC LOAN -EUR</b>					
Gross Loan-Opening	47.034	47.034	47.034	47.034	47.034
Cumulative repayments of loans upto previous year	8.9589	13.4383	17.9177	22.3971	26.8766
Net Loans-Opening	38.0751	33.5957	29.1163	24.6369	20.1574
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	4.4794	4.4794	4.4794	4.4794	4.4794
Net Loan-Closing	33.5957	29.1163	24.6369	20.1575	15.678



Average Net Loan	35.8354	31.356	26.8766	22.3972	17.9177
Rate of interest on Loan on Annual Basis	4.565	4.565	4.565	4.565	4.565
Interest on loan	1.635886	1.431401	1.226917	1.022432	0.817943

<b>KFW NEW -DOCO LOAN -EUR</b>					
Gross Loan-Opening	5.258	5.258	5.258	5.258	5.258
Cumulative repayments of loans upto previous year	1.0015	1.5023	2.003	2.5038	3.0046
Net Loans-Opening	4.2565	3.7557	3.255	2.7542	2.2534
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	0.5008	0.5008	0.5008	0.5008	0.5008
Net Loan-Closing	3.7557	3.2549	2.7542	2.2534	1.7526
Average Net Loan	4.0061	3.5053	3.0046	2.5038	2.003
Rate of interest on Loan on Annual Basis	4.565	4.565	4.565	4.565	4.565
Interest on loan	0.182878	0.160017	0.13716	0.114298	0.091437



(Petitioner)



**Calculation of interest on Normative loan**

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO			
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station			
Region	Eastern Region	DOC Date	Jul 27, 2020	

(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	11,786.36	11,803.27	11,803.27	11,803.27	11,803.27
Cumulative repayments of Normative loan upto previous year	3,219.86	4,139.71	5,060.20	5,980.52	6,886.05
Net normative loan-Opening	8,566.50	7,663.56	6,743.07	5,822.75	4,917.22
Addition in normative loan towards the ACE	16.91	0.00	0.00	0.00	0.00
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	919.85	920.49	920.32	905.53	888.07
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	7,663.56	6,743.07	5,822.75	4,917.22	4,029.15
Average normative loan	8,115.03	7,203.32	6,282.91	5,369.99	4,473.19
Weighted Average Rate of interest on actual loan	3.6368	3.4567	3.3331	3.375	3.5938
Interest on normative loan	295.13	249.00	209.42	181.24	160.76
Pro rata interest on normative loan	295.13	249.00	209.42	181.24	160.76

(Petitioner)



**Calculation of Depreciation Rate on Original Project Cost**

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO		
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station		
Region	Eastern Region	DOCO Date	Jul 27, 2020

(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
<b>2024-25</b>						
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	14,091.31	0.00	14,091.31	14,091.31	5.28	744.02
Sub Station	2,435.80	24.16	2,459.96	2,447.88	5.28	129.25
Comm. Sys. excluding Fiber Optic	210.80	0.00	210.80	210.80	15.00	31.62
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	99.75	0.00	99.75	99.75	15.00	14.96
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
<b>TOTAL</b>	<b>16,837.66</b>	<b>24.16</b>	<b>16,861.82</b>	<b>16,849.74</b>	<b>0.00</b>	<b>919.85</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.459135</b>	

<b>2025-26</b>						
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	14,091.31	0.00	14,091.31	14,091.31	5.28	744.02
Sub Station	2,459.96	0.00	2,459.96	2,459.96	5.28	129.89
Comm. Sys. excluding Fiber Optic	210.80	0.00	210.80	210.80	15.00	31.62
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	99.75	0.00	99.75	99.75	15.00	14.96
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
<b>TOTAL</b>	<b>16,861.82</b>	<b>0.00</b>	<b>16,861.82</b>	<b>16,861.82</b>	<b>0.00</b>	<b>920.49</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.459019</b>	

<b>2026-27</b>						
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	14,091.31	0.00	14,091.31	14,091.31	5.28	744.02
Sub Station	2,459.96	0.00	2,459.96	2,459.96	5.28	129.89
Comm. Sys. excluding Fiber Optic	210.80	0.00	210.80	210.80	15.00	31.62
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	99.75	0.00	99.75	99.75	15.00	14.79
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
<b>TOTAL</b>	<b>16,861.82</b>	<b>0.00</b>	<b>16,861.82</b>	<b>16,861.82</b>	<b>0.00</b>	<b>920.32</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.458011</b>	



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	14,091.31	0.00	14,091.31	14,091.31	5.28	744.02
Sub Station	2,459.96	0.00	2,459.96	2,459.96	5.28	129.89
Comm. Sys. excluding Fiber Optic	210.80	0.00	210.80	210.80	15.00	31.62
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	99.75	0.00	99.75	99.75	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
<b>TOTAL</b>	<b>16,861.82</b>	<b>0.00</b>	<b>16,861.82</b>	<b>16,861.82</b>	<b>0.00</b>	<b>905.53</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.370298</b>	

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	14,091.31	0.00	14,091.31	14,091.31	5.28	744.02
Sub Station	2,459.96	0.00	2,459.96	2,459.96	5.28	129.89
Comm. Sys. excluding Fiber Optic	210.80	0.00	210.80	210.80	15.00	14.16
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	99.75	0.00	99.75	99.75	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
<b>TOTAL</b>	<b>16,861.82</b>	<b>0.00</b>	<b>16,861.82</b>	<b>16,861.82</b>	<b>0.00</b>	<b>888.07</b>



Weighted Average Rate of Depreciation(%)					5.266751	
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(Petitioner)





**Statement of Depreciation**

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO			
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station			
Region	Eastern Region	DOC Date	Jul 27, 2020	

(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
<b>Life at the beginning of the year</b>					
1.1 Weighted Average useful life of the Asset/ Project	34.00	34.00	34.00	34.00	34.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	3.00	4.00	5.00	6.00	7.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	31.00	30.00	29.00	28.00	27.00
<b>Capital Base</b>					
1.4 Opening capital cost	16,837.66	16,861.82	16,861.82	16,861.82	16,861.82
1.5 Additional Capital Expenditure dr. the year	24.16	0.00	0.00	0.00	0.00
1.6 De-Capitalisation During the year	0.00	0.00	0.00	0.00	0.00
1.7 Closing capital cost	16,861.82	16,861.82	16,861.82	16,861.82	16,861.82
1.8 Average capital cost	16,849.74	16,861.82	16,861.82	16,861.82	16,861.82
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	99.75	99.75	99.75	99.75	99.75
1.11 Asset having 10% salvage value included in 1.8	16,749.99	16,762.07	16,762.07	16,762.07	16,762.07
1.12 Depreciable Value(1.10+90% of 1.11)	15,174.74	15,185.61	15,185.61	15,185.61	15,185.61
<b>Depreciation for the period and Cum. Depreciation</b>					
1.13 Weighted Average Rate of depreciation	5.459135	5.459019	5.458011	5.370298	5.266751



1.14 Depreciation(for the period)	919.85	920.49	920.32	905.53	888.07
1.15 Depreciation(Annualised)	919.85	920.49	920.32	905.53	888.07
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	3,219.86	4,139.71	5,060.20	5,980.52	6,886.05
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	4,139.71	5,060.20	5,980.52	6,886.05	7,774.12

(Petitioner)



**Calculation of interest on working Capital**

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Baharampur (POWERGRID) - Bheramara (BANGLADESH) 02nd 400kV D/C transmission line (INDIAN PORTIO		
Element Description	400kV D/C (02nd) Baharampur (POWERGRID) - Bheramara (BANGLADESH) line and associated line bays at Baharampur sub-station		
Region	Eastern Region	DOC Date	Jul 27, 2020

(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	11.23	11.82	12.43	13.08	13.77
Maintenance spares 15% of O&M Expenses	20.21	21.27	22.38	23.55	24.79
Receivables equivalent to 45 days of AFC	288.14	283.44	279.42	274.29	271.37
Total Working capital	319.58	316.53	314.23	310.92	309.93
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	38.03	37.67	37.39	37.00	36.88
Pro rata interest on working capital	38.03	37.67	37.39	37.00	36.88

(Petitioner)





## PART-III

## Summary of Capital Cost &amp; 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 "Baharampur (POWERGRID) – Bheramara (BANGLADESH) 02ND 400 kV D/C transmission line (INDIAN PORTION)" in Eastern Region
COD of the Project (if entire scope of project is completed)	27.07.2020

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.

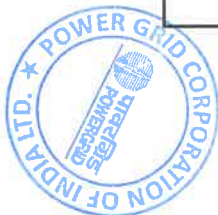
S. No.	Asset No.	COD	Cut-off Date	i) Apportioned Approved Cost		ii) Summary of Actual / Projected Capital Cost							Capital Cost as on Cut-off Date
				As per IA	As per RCE	As on COD/ as on 31.03.2019	2019-20	2020-21	2021-22	2022-23	2023-24	Capital Cost as on 31.03.2024	
				1	2	2	3	4	5	6	7	8	
1	Asset-I	27.07.2020	31.07.2023	19849.00	NA	15492.73	0	223.52	805.94	229.15	86.31	16837.65	
<b>Total Capital Cost Claimed</b>				<b>19849.00</b>	<b>0.00</b>	<b>15492.73</b>	<b>0.00</b>	<b>223.52</b>	<b>805.94</b>	<b>229.15</b>	<b>86.31</b>	<b>16837.65</b>	

## B) Summary of Trued-Up 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-I	Assets under "Baharampur (POWERGRID) – Bheramara (BANGLADESH) 02ND 400 kV D/C transmission line (INDIAN PORTION)" in Eastern Region	-	1408.95	2145.75	2249.04	2368.39
<b>Total AFC for all the Assets</b>			<b>0</b>	<b>1408.95</b>	<b>2145.75</b>	<b>2249.04</b>	<b>2368.39</b>

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

(Petitioner)



PART-III														
Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL the assets covered in the present petition.														
Name of the Petitioner				Powergrid Corporation of India Ltd										
Tariff Period				2024-29										
Name of the Transmission Project				Assets under "Baharampur (POWERGRID) – Bheramara (BANGLADESH) 02ND 400 kV D/C transmission line (INDIAN PORTION)" in Eastern Region										
COD of the Project (if entire scope of project is completed)				27.07.2020										
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	Cut-off Date	i) Apportioned Approved Cost		ii) Summary of Actual / Projected Capital Cost							Capital Cost as on Cut-off Date	
				As per IA	As per RCE	As on COD/ as on 31.03.2024	2024-25	2025-26	2026-27	2027-28	2028-29	Capital Cost considered as on 31.03.2029		
				1	2	2	3	4	5	6	7	8		9
1	Asset-I	27.07.2020	31.07.2023	19849.00	NA	16837.65	24.16	0	0	0	0	0	16861.81	
<b>Total Capital Cost Claimed</b>				<b>19849.00</b>	<b>0.00</b>	<b>16837.65</b>	<b>24.16</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>16861.81</b>	
B) Summary of Annual Fixed Cost (AFC) claimed for all the assets covered in the instant petition.														
S. No.	Asset No.	Asset Name and its location					2024-25	2025-26	2026-27	2027-28	2028-29			
1	Asset-I	Assets under "Baharampur (POWERGRID) – Bheramara (BANGLADESH) 02ND 400 kV D/C transmission line (INDIAN PORTION)" in Eastern Region					2337.16	2299.05	2266.41	2230.88	2201.08			
<b>Total AFC for all the Assets</b>						<b>2337.16</b>	<b>2299.05</b>	<b>2266.41</b>	<b>2230.88</b>	<b>2201.08</b>				
<b>Note: 1) The purpose of this form is to summarise the Capital cost &amp; AFC claimed for all the assets covered in the instant petition.</b>														
(Petitioner)														

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INDEX Checklist of Forms and other Information/ documents for tariff filing for Transmission System & Communication System (2019-24 & 2024-29 periods)		PART-III
Form No.	Title of Tariff Filing Forms (Transmission & Communication System)	Tick
FORM- 1	Summary of Tariff	✓
FORM- 1A	Summary of Asset level cost	N.A.
FORM-2	Details of Transmission Lines and Substations and Communication System covered in the project scope and O&M for instant asset	✓
FORM-3	Normative parameters considered for tariff computations	N.A.
FORM- 4	Abstract of existing transmission assets/elements under project, Determination of Effective COD and Weighted Average Life for single AFC for the project as whole.	N.A.
FORM- 4A	Statement of Capital cost	N.A.
FORM- 4B	Statement of Capital Works in Progress	N.A.
FORM- 4C	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New Project/Element	N.A.
FORM-5	Element wise Break-up of Project/Asset/Element Cost for Transmission System or Communication System	N.A.
FORM-5A	Break-up of Construction/Supply/Service packages	N.A.
FORM-5B	Details of all the assets covered in the project	N.A.
FORM- 6	Actual Cash Expenditure and Financial Package up to COD	✓
FORM- 7	Statement of Additional Capitalisation after COD	N.A.
FORM- 7A	Financing of Additional Capitalisation	✓
FORM- 7B	Statement of Additional Capitalisation during five year before the end of the useful life of the project.	N.A.
FORM- 8	Calculation of Return on Equity	✓
FORM-8A	Details of Foreign Equity	N.A.
FORM-9	Details of Allocation of corporate loans to various transmission elements	N.A.
FORM-9A	Details of Project Specific Loans	N.A.
FORM-9B	Details of Foreign loans	N.A.
FORM-9C	Calculation of Weighted Average Rate of interest on Actual Loans	✓
FORM-9D	Loans in Foreign Currency	✓
FORM-9E	Calculation of interest on Normative Loan	✓
FORM- 10	Calculation of Depreciation Rate on original project cost	✓
FORM- 10A	Statement of Depreciation	✓
FORM- 10B	Statement of De-capitalisation	N.A.
FORM- 11	Calculation of interest on Working Capital	✓
FORM- 12	Details of time over run	N.A.
FORM- 12A	Incidental Expenditure during Construction	N.A.
FORM- 12B	Calculation of IDC & Financing Charges	N.A.
FORM- 13	Details of Initial spares	N.A.
FORM- 14	Non-Tariff Income	N.A.
FORM- 15	Summary of issue involved in the petition	✓
FORM A	Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL	✓
<b>Other Information/ Documents</b>		
S. No.	Information/Document	Tick
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC)	N.A.
2	Region wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & Annexure for the new Transmission System & Communication System for the relevant years.	N.A.
3	Copies of relevant loan Agreements	N.A.
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	N.A.
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	N.A.
6	Copies of the BPTA/TSA/PPA with the beneficiaries, if any	N.A.
7	Detailed note giving reasons of cost and time over run, if applicable. List of supporting documents to be submitted: a. Detailed Project Report b. CPM Analysis c. PERT Chart and Bar Chart d. Justification for cost and time Overrun	N.A.
8	Transmission Licensee shall submit copy of Cost Audit Report along with cost accounting records, cost details, statements, schedules etc. for the transmission system as submitted to the Govt. of India for first two years i.e. 2019-20 and 2020-21 at the time of mid-term true-up in 2021- 22 and for balance period of tariff period 2019-24 at the time of final true-up in 2024-25. In case of initial tariff filing the latest available Cost Audit Report should be furnished.	N.A.
9.	BBMB is maintaining the records as per the relevant applicable Acts. Formats specified herein may not be suitable to the available information with BBMB. BBMB may modify formats suitably as per available information to them for submission of required information for tariff purpose.	N.A.
10.	Any other relevant information, (Please specify)	N.A.
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.		

