

**BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION,  
NEW DELHI**

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

**IN THE MATTER OF:** Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for LILO of both circuits of Mundra UMPP– Limbdi 400 kV D/C line (triple snowbird) at Bachau Sub-station along with extension of 400 kV Bachau Sub-station under “**Transmission System Strengthening associated with Mundra UMPP (Part-A)**” in Western 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.**

**---PETITIONER**

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

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

**Madhya Pradesh Power Management Company  
Ltd.**

**---RESPONDENTS**

Shakti Bhawan, Rampur

Jabalpur - 482 008

Represented by Its MD

**and Others**

**Place: Gurugram**

**Petitioner**

**Date: 11.11.2024**

**(Zafrul Hasan)**

**General Manager (Commercial)**



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**Madhya Pradesh Power Management Company Ltd.**

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Shakti Bhawan, Rampur

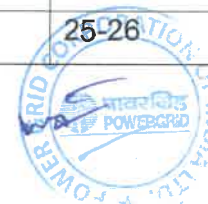
Jabalpur - 482 008

Represented by Its MD

**and Others**

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

**GURGAON**

**DATED: 11.11.2024**

**REPRESENTED BY**

*[Handwritten Signature]*

**Zafrul Hasan**

**General Manager (Commercial)**



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--- **PETITIONER**

**Madhya Pradesh Power Management Company Ltd.**

Shakti Bhawan, Rampur  
Jabalpur - 482 008  
Represented by Its MD

----- **RESPONDENTS**

**and Others**

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.

**GURGAON**

**FILED BY**

**DATED:11.11.2024**

**POWER GRID CORPORATION OF INDIA LTD.**

**REPRESENTED BY**



**Zafrul Hasan**

**General Manager (Commercial)**



**BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION,  
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**Petition No. \_\_\_ /TT/ \_\_\_**

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**Madhya Pradesh Power Management Company Ltd.**

**----- RESPONDENTS**

Shakti Bhawan, Rampur

Jabalpur - 482 008

Represented by Its MD

**and Others**

**MEMO OF PARTIES**

**Power Grid Corporation of India Ltd.**

**---PETITIONER**

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

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

**VERSUS**

**1. MADHYA PRADESH POWER MANAGEMENT COMPANY LTD.**

SHAKTI BHAWAN, RAMPUR, JABALPUR - 482 008

EMAIL-[ANURAG.NAIK@MPPMCL.COM](mailto:ANURAG.NAIK@MPPMCL.COM)&[COMML.DEPTT@MPPMCL.COM](mailto:COMML.DEPTT@MPPMCL.COM)

CONTACT NO- 9425805876



REPRESENTED BY ITS MD

2. **MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.**

PRAKASHGAD, PLOT NO G-9, A K MARG, BANDRA (EAST), MUMBAI-400 051

EMAIL- [CEPPMSEDCL@GMAIL.COM](mailto:CEPPMSEDCL@GMAIL.COM)

CONTACT NO- 9833387967

REPRESENTED BY ITS MD

3. **GUJARAT URJA VIKAS NIGAM LTD.**

SARDAR PATEL VIDYUT BHAWAN, RACE COURSE ROAD, VADODARA - 390 007

EMAIL- [DECSP.GUVNL@GEBMAIL.COM](mailto:DECSP.GUVNL@GEBMAIL.COM)

CONTACT NO- 7069009628

REPRESENTED BY ITS MD

4. **ELECTRICITY DEPARTMENT**

VIDYUT BHAWAN, GOVT. OF GOA, PANAJI, GOA - 403 001

EMAIL- [CEE-ELEC.GOA@NIC.IN](mailto:CEE-ELEC.GOA@NIC.IN)

CONTACT NO- 7350644000

REPRESENTED BY ITS CHIEF ENGINEER (ELECTRICAL)

5. **DNHDD POWER DISTRIBUTION CORPORATION LIMITED**

VIDYUT BHAWAN, 66KV ROAD, NEAR SECRETARIAT, AMLI, SILVASSA - 396 230

EMAIL- [BHAVIKSHAH@TORRENTPOWER.COM](mailto:BHAVIKSHAH@TORRENTPOWER.COM)

CONTACT NO- 9227758405

REPRESENTED BY ITS SECRETARY (FIN.)

6. **CHHATTISGARH STATE POWER DISTRIBUTION COMPANY LIMITED**

P.O. SUNDER NAGAR, DANGANIA, RAIPUR, CHHATTISGARH-492 013

EMAIL- [CECOMCSEB@REDIFFMAIL.COM](mailto:CECOMCSEB@REDIFFMAIL.COM)

CONTACT NO- 982618253

REPRESENTED BY ITS CHAIRMAN

**FILED BY**

**POWER GRID CORPORATION OF INDIA LTD**

**REPRESENTED BY:**

**PLACE: Gurugram**

**DATE: 11.11.2024**

**Zafrul Hasan**

**General Manager (Commercial)**



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**Madhya Pradesh Power Management Company Ltd.**

**----- RESPONDENTS**

Shakti Bhawan, Rampur  
Jabalpur - 482 008  
Represented by Its MD  
**and Others**

**MEMO OF APPEARANCE**

**POWER GRID CORPORATION OF INDIA LTD.**

**-- PETITIONER**

1. Shri Dilip Nagesh Rozekar, ED (Commercial & RC), POWERGRID
2. Shri Mohd. Mohsin, Chief GM (Comml- Petition), POWERGRID
3. Shri V.C. Sekhar, Sr. GM (Commercial-RC), POWERGRID
4. **Shri Zafrul Hasan, GM (Comml- Petition), POWERGRID**
5. Shri Vishal Sagar, DGM (Comml- Petition), POWERGRID
6. Shri Arjun Malhotra, Manager (Law), POWERGRID



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

IN WITNESS WHEREOF I have set and subscribed my hands to this writing on this 11<sup>th</sup> day of November' 2024.

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



**GURGAON**

**Zafrul Hasan**

**DATED: 11.11.2024**

**General Manager (Commercial)**



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**Madhya Pradesh Power Management Company Ltd.**

**----- RESPONDENTS**

Shakti Bhawan, Rampur

Jabalpur - 482 008

Represented by Its MD

**and Others**

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

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

2. POWERGRID has filed the present petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for the following Assets which are implemented under “**Transmission System Strengthening associated with Mundra UMPP (Part-A)**” in Western Region” for the following:

Asset No	Asset Name	DOCO	Remark
Asset-I	LILO of both circuits of Mundra UMPP- Limbdi 400 kV D/C line (triple snowbird) at Bachau Sub-station along with extension of 400 kV Bachau Sub-station.	30.10.2017	Earlier covered under petition no. 447/TT/2020

**(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/DOCO 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/RCE 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:

**Rs in lakhs**

Asset No.	Approved Cost as per FR/RCE	Expenditure Up to 31.03.2019	Expenditure during 2019-24 tariff block					Estimated completion Cost as on 31.03.2024
			2019-20	2020-21	2021-22	2022-23	2023-24	
Asset-I	24418.19	14805.71	24.98	29.50	--	--	--	14860.19

**Rs in lakhs**

Asset No.	Approved Cost as per FR/RCE	Expenditure Up to 31.03.2024	Estimated expenditure during 2024-29 tariff block					Estimated completion Cost as on 31.03.2029
			2024-25	2025-26	2026-27	2027-28	2028-29	
Asset-I	24418.19	14860.19	--	--	--	--	--	14860.19

5. It is prayed to hon'ble commission to reimburse expenditure of petition filing fee, license fee, newspaper publication expanses and RLDC fee & charges etc.

6. Details of tariff claimed are as under:

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

**Rs in Lakhs**

Name of the asset	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-I	AFC approved	2657.23	2733.00	2665.11	2600.28	2535.78
	Revised AFC based on truing up	2509.78	2431.33	2371.26	2328.59	2288.39

Tariff claimed for 2024-29 tariff block:

**Rs in Lakhs**

Name of the asset	2024-25	2025-26	2026-27	2027-28	2028-29
Asset-I	2208.96	2145.81	2086.93	2010.37	1957.39





**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 Asset:

Asset No	Asset Name	DOCO	Remark
Asset-I	LILO of both circuits of Mundra UMPP– Limbdi 400 kV D/C line (triple snowbird) at Bachau Sub-station along with extension of 400 kV Bachau Sub-station.	30.10.2017	Earlier covered under petition no. 447/TT/2020

**10. Cost detail:**

The details of admitted cost for the assets covered in instant petition as per Hon'ble Commission order dated 03.01.2022 in petition no. 447/TT/2020 (Encl-1) for 2019-24 tariff block, and claimed cost now is given hereunder:

**For Asset:****(Rs in lakhs)**

Cost allowed as per order in petition no. 447/TT/2020 (A)							
Apportioned cost as per FR/RCE	Capital cost as on 31.03.2019	Add cap during During 2019-24					Capital cost as on 31.03.2024
		2019-20	2020-21	2021-22	2022-23	2023-24	
24418.19	14825.50	1717.09	0.00	0.00	0.00	0.00	16542.59
Cost claimed in the instant petition (B)							
24418.19	14805.71	24.98	29.50	--	--	--	14860.19
Variation (B-A)	19.79	-1692.11	29.50	0	0	0	-1682.40#



# The primary reason for the substantial cost variation is the difference in compensation projections. An amount of Rs. 1562.77 lakhs were initially projected for crop, tree, and land compensation under the Transmission Line (TL) head. However, the actual expenditure incurred against Transmission Line (TL) head was only Rs. 16.90 lakhs, with no further compensation expected in above project. Further, there is minor variation in Substation, Building & civil work head w.r.t project cost. Add - Cap approved by the Commission in petition no: 447/TT/2020 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 is enclosed at **Encl-2**.

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

Asset-I							
Expenditure	Land	Building & civil work	Trans. Lines	Sub-Station	Comm. Sys. excluding Fiber Optic	I.T Equipment including software	Total
As per Auditor Certificate as on 31.03.2019	0.00	56.97	12455.75	2043.09	215.64	54.05	14825.50
<b>Less: Excess Initial Spares*</b>	0.00	0.00	14.86	4.93	0.00	0.00	19.79
<b>Expenditure upto 31.03.2019</b>	<b>0.00</b>	<b>56.97</b>	<b>12440.89</b>	<b>2038.16</b>	<b>215.64</b>	<b>54.05</b>	<b>14805.71</b>
<b>Add Cap expenditure during 2019-20</b>	<b>0.00</b>	<b>19.80</b>	<b>16.90</b>	<b>-11.72</b>	<b>0.00</b>	<b>0.00</b>	<b>24.98</b>
<b>Add Cap during 2020-21</b>	<b>0.00</b>	<b>23.65</b>	<b>0.00</b>	<b>5.85</b>	<b>0.00</b>	<b>0.00</b>	<b>29.50</b>



Asset-I							
Expenditure	Land	Building & civil work	Trans. Lines	Sub-Station	Comm. Sys. excluding Fiber Optic	I.T Equipment including software	Total
<b>Total completion cost</b>	<b>0.00</b>	<b>100.42</b>	<b>12457.79</b>	<b>2032.29</b>	<b>215.64</b>	<b>54.05</b>	<b>14860.19</b>

\* Initial spares have been allowed by Hon'ble Commission vide order in petition no. 447/TT/2020. However, based on revised completion cost up to cutoff date i.e. 31.03.2020, initial spares are recalculated as tabulated below and excess initial spares of Rs 19.79 lakh has been reduced from the cost as on 31.03.2019.

### 10.2 Initial spares:

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

Asset No	Plant and Machinery cost for calculation of initial spares (A)	Initial Spares claimed (B)	Ceiling limit as per Regulations in % (C)	Spares as per ceiling limit D= (A-B) *C/ (100-C)	Excess Spare (If B-D>0)
TL	11928.38	134.00	1	119.14	14.86
SS	2164.28	134.49	6	129.56	4.93
<b>Total</b>	<b>14092.66</b>	<b>268.49</b>		<b>248.70</b>	<b>19.79</b>

### Initial Spares Discharge Details:

Asset No	Admissible Initial Spares	Initial Spares Discharged as on COD	Initial Spares discharged as ACE	
			2017-18	2018-19
TL	119.14	119.14	-	-
SS	129.56	47.59	81.97	-

### Capital cost details for 2024-29 tariff block:

Rs in Lakhs

Asset No.	Approved Cost as per RCE	Expenditure Up to 31.03.2024	Estimated expenditure during 2024-29 tariff block					Estimated completion Cost as on 31.03.2029
			2024-25	2025-26	2026-27	2027-28	2028-29	
Asset-I	24418.19	14860.19	--	--	--	--	--	14860.19

Copy of auditor certificate w.r.t. claimed cost in the instant petition is enclosed at **Encl-3**.



**Additional capitalization claims under Regulation:**

Sl No.	Asset	DOCO/Effective DOCO date	Cutoff date
1.	Asset-I	30.10.2017	31.03.2020

**Add cap for 2019-24 block:**

Asset	Add cap details (Rs. Lakhs)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-1	<b>24.98</b>	<b>29.51</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	Claimed under Regulation 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations	Claimed under regulation 25(1)(d) of the 2019 Tariff Regulations (Undischarged liability for work done prior to cut-off date)			

**Add cap for 2024-29 block:**

Asset	Add cap detail (Rs. Lakhs)				
	2024-25	2025-26	2026-27	2027-28	2028-29
Combined Asset	No Add Cap				

**11. 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.

<b>Financial Year</b>	<b>Basis considered</b>	<b>Total Tax &amp; Interest paid (Rs)</b>	<b>Assessed MAT Income under Sec 115 JB (Rs)</b>	<b>Effective Tax percentage</b>	<b>Grossed up ROE (Base rate/(1-t))</b>
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.

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

		Rs in Lakh				
Project		2019-20	2020-21	2021-22	2022-23	2023-24
Asset	AFC approved	2657.23	2733.00	2665.11	2600.28	2535.78
	Revised AFC based on truing up	2509.78	2431.33	2371.26	2328.59	2288.39





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

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

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

Rs in Lakh

Project		2024-25	2025-26	2026-27	2027-28	2028-29
Combined	AFC	2208.96	2145.81	2086.93	2010.37	1957.39
Asset						

Tariff Filing Formats along with the other relevant information and supporting documentation are attached hereto as **Encl-5**.

14. The asset will complete 12 Yrs beyond the tariff block 2024-29, thus depreciation 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.
15. 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.

16. 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 12 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.
17. 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 has been submitted along with the truing up petition of **POWERGRID Works associated with Transmission system Strengthening in WR associated with Khargone TPS** with **Diary No. 716/2024**. These documents/details are also available on our website [www.powergrid.in](http://www.powergrid.in).





18. The transmission charges at para-12 & 13 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.
19. That as per Regulation 36(3)(d) of CERC Tariff Regulations, 2024, the Security Expenses, Insurance and Capital Spares more than Rs. 10 Lakh for transmission system shall be allowed separately after prudence check.

**Security Expenses:**

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

**Insurance:**

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

**Capital Spare:**

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



20. 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.

21. 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.
22. The Transmission Charges and other related Charges indicated at para 12 & 13 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.
23. **Sharing of Transmission Charges**  
Truing up tariff for Transmission of Electricity (Annual Fixed Cost) for 2019-24 as per para 12 shall be recovered on monthly basis in accordance with Regulation 57 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and shall be shared by the beneficiaries and long-term transmission customers in accordance with the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 & 2020 or as amended from time to time.



Tariff for Transmission of Electricity (Annual Fixed Cost) for 2024-29 as per para 13 above shall be recovered on monthly basis in accordance with Regulation 78 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 and shall be shared by the beneficiaries and long-term transmission customers in accordance with the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 or as amended from time to time

24. 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.-6 may please be treated as integral part of this petition.**

**A. PRAYER**

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

- a) Approve the trued-up Transmission Tariff for 2019-24 block and transmission tariff for 2024-29 block for the assets covered under this petition, as per para 12 and 13 above.
- b) Admit the capital cost claimed and additional capitalization incurred during 2019-24.
- c) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 and Tariff regulations 2024 as per para 12 and 13 above for respective block.
- d) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 94 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, and other expenditure (if any) in relation to the filing of petition.
- e) Allow the petitioner to bill and recover 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.

- f) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2024-29 period, if any, from the respondents.
- g) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 19 above.
- h) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall insurance expenses and consequential IOWC on that insurance expenses as mentioned at para 19 above.
- i) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall capital spares as mentioned at Para 19 above.
- j) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition as mentioned at para 20 above.
- k) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

**GURGAON**

**DATED: 11.11.2024**

**POWER GRID CORPORATION OF INDIA LTD.**

**REPRESENTED BY**

**Zafrul Hasan**  
**General Manager (COMMERCIAL)**



**BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION,  
NEW DELHI**

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

**IN THE MATTER OF:** Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for LILO of both circuits of Mundra UMPP– Limbdi 400 kV D/C line (triple snowbird) at Bachau Sub-station along with extension of 400 kV Bachau Sub-station under “**Transmission System Strengthening associated with Mundra UMPP (Part-A)**” in Western 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.**

---PETITIONER

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

**Madhya Pradesh Power Management Company  
Ltd.**

---RESPONDENTS

Shakti Bhawan, Rampur  
Jabalpur - 482 008  
Represented by Its MD  
**and Others**

**AFFIDAVIT VERIFYING THE PETITION**

I, Zafrul Hasan, S/O Late Sh Zahurul Hasan, working as General Manager (Commercial) in the Power Grid Corporation of India Ltd., having its registered Office at B-9, 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 24 of the facts as mentioned in the Petition are true and correct based on my personal knowledge, belief and records maintained in the office and the contents of Para 01 to 24 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 11<sup>th</sup> day of November' 2024 that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.



ATTESTED TRUE COPY (DEPONENT)

Authorised Signatory  
Power Grid Corporation of India Ltd.  
Plot No. 2, Sector-29, Gurgaon-122001 (HARYANA)



ATTESTED  
26  
MAHENDER S. PANIA  
ADVOCATE & NOTARY  
Distt. Gurugram (Haryana) India



Ref: CC/Commercial/2024

Date: 28.08.2024

### LETTER OF AUTHORIZATION

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

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

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

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

  
28/08/2024

Dilip Nagesh Rozekar  
Executive Director (Commercial & RC)

दिलीप रोजेकर / 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. 447/TT/2020**

**Coram:**

**Shri P.K. Pujari, Chairperson  
Shri Arun Goyal, Member  
Shri P. K. Singh, Member**

**Date of Order: 03.01.2022**

**In the matter of:**

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of the transmission tariff of the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for LILO of both circuits of Mundra UMPP–Limbdli 400 kV D/C line (triple snowbird) at Bachau Sub-station along with extension of 400 kV Bachau Sub-station under “Transmission System Strengthening associated with Mundra UMPP (Part-A)” in Western Region.

**And in the matter of:**

Power Grid Corporation of India Limited,  
“Saudamini”, Plot No. 2, Sector 29,  
Gurgaon-122001, Haryana.

**...Petitioner**

Vs.

1. Madhya Pradesh Power Management Company Limited,  
Shakti Bhawan, Rampur,  
Jabalpur – 482008.
2. Madhya Pradesh Power Transmission Company Limited,  
Shakti Bhawan, Rampur,  
Jabalpur – 482008.
3. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited,  
3/54, Press Complex, Agra-Bombay Road,  
Indore – 452008.
4. Maharashtra State Electricity Distribution Company Limited,  
Hongkong Bank Building, 3rd Floor,  
M.G. Road, Fort, Mumbai-400001.

**ATTESTED TRUE COPY**

*Pagano 28-71*  
Authorised Signatory

Power Grid Corporation of India Ltd. Page 1 of 44  
Plot No. 2, Sector-29, Gurgaon-122001 (HARYANA)



Order in Petition No. 447/TT/2020





5. Maharashtra State Electricity Transmission Company Limited,  
Prakashganga, 6<sup>th</sup> Floor, Plot No. C-19, E-Block,  
Bandra Kurla Complex, Bandra (East),  
Mumbai-400051.
  6. Gujarat Urja Vikas Nigam Limited,  
Sardar Patel Vidyut Bhawan,  
Racecourse Road,  
Vadodara – 390007.
  7. Electricity Department,  
Govt. of Goa, Vidyut Bhawan, Panaji,  
Near Mandvi Hotel,  
Goa – 403001.
  8. Electricity Department,  
Administration of Daman & Diu,  
Daman – 396210.
  9. DNH Power Distribution Corporation Limited,  
Vidyut Bhawan, 66 kV Road, Near Secretariat Amla,  
Silvassa - 396230
  10. Chhattisgarh State Power Transmission Company Limited,  
Office of the Executive Director (C&P),  
State Load Despach Building, Dangania,  
Raipur – 492013.
  11. Chhattisgarh State Power Distribution Company Limited,  
P.O. Sunder Nagar, Dangania,  
Raipur, Chhattisgarh – 492013.
- ...Respondent(s)

**For Petitioner** : Shri S.S. Raju, PGCIL  
Shri D.K. Biswal, PGCIL  
Shri Ved Prakash Rastogi, PGCIL  
Shri A.K. Verma, PGCIL

**For Respondents** : Shri Anindya Khare, MPPMCL

### ORDER

The Petitioner, Power Grid Corporation of India Ltd., a deemed transmission licensee, has filed the instant petition for truing up of transmission tariff for the period from COD to 31.3.2019 under the Central Electricity Regulatory Commission (Terms



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and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and determination of transmission tariff for the period from 1.4.2019 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 the Asset-I: LILO of both circuits of Mundra UMPP–Limbdri 400 kV D/C line (triple snowbird) at Bachau Sub-station along with extension of 400 kV Bachau Sub-station (hereinafter referred to as “transmission asset”) under the “Transmission System Strengthening associated with Mundra UMPP (Part-A)” (hereinafter referred to as “the transmission project”) in Western Region.

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

- “1) Allow the add cap for 2014-19 and 2019-24 tariff block as claimed as per Para 5 and 7 above.
- 2) Approve the trued-up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 6 and 7 above.
- 3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 6 and 7 above for respective block.
- 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
- 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
- 6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.



7) *Allow the petitioner to 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 7.6 above.*

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

9) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the 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”.*

### **Background**

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

(a) The Investment Approval (IA) and expenditure sanction for the transmission project was accorded by the Board of Directors of the Petitioner company vide Memorandum No. C/CP/UMPP Part-A dated 12.1.2016 at an estimated cost of ₹ 24419 lakh, including an IDC of ₹ 1509 lakh based on August 2015 price level.

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

- (i) LILO of both circuits of Mundra UMPP-Limbdi 400 kV D/C line (triple snowbird) at Bachau Sub-station.
- (ii) Extension of 400 kV Bachau Sub-Station-Line bays: 4nos.

(c) The entire scope of work under the transmission project has been completed and is covered under the instant petition.

(d) The transmission asset was scheduled to be put into commercial operation within 30 months from the date of IA (12.1.2016) i.e. by 12.7.2018.

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



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SCOD	COD	Time over-run
12.7.2018	30.10.2017	-

(f) The transmission tariff in respect of the transmission asset was allowed by the Commission from its COD to 31.3.2019 vide order dated 29.6.2018 in Petition No.196/TT/2017.

(g) The Annual Fixed Charges (AFC) allowed by the Commission vide order dated 29.6.2018 in Petition No.196/TT/2017 and trued-up tariff claimed by the Petitioner in respect of the transmission asset for the 2014-19 tariff period are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
AFC allowed vide order dated 29.6.2018 in Petition No.196/TT/2017	1070.41	2929.50
AFC claimed by the Petitioner based on truing up in the instant petition	1081.01	2755.90

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

5. The Petitioner has served the petition on the Respondents and notice of this application has also been published in the newspapers in accordance with Section 64 of the Electricity Act 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. Madhya Pradesh Power Management Company Limited (MPPMCL) has filed its reply vide affidavit dated 5.6.2020 and has raised issues of grossing up of RoE and effects of CGST. In response, the Petitioner has filed its rejoinder to MPPMCL's reply vide affidavit dated 28.8.2020.



6. The hearing in this matter was held on 10.9.2021 through video conference and the order was reserved.

7. Having heard the representative of the Petitioner and having perused the materials on record, we proceed to dispose of the petition.

8. This order is issued considering the submissions made by the Petitioner in the petition, affidavits dated 4.10.2021, 28.6.2021, MPPMCL's reply filed vide affidavit 5.6.2020 and the Petitioner's rejoinder filed vide affidavit dated 28.8.2020.

9. It has been placed before us that MPPMCL has been raising the same issues in other petitions as well despite clear findings of the Commission rejecting the contentions of MPPMCL. The contentions of MPPMCL regarding RoE have been rejected by the Commission in other petitions including Petition No. 348/TT/2019. As MPPMCL has not challenged the findings, the same have attained finality. In view of these, the pleas raised by MPPMCL regarding grossing up of RoE are rejected. Further, MPPMCL's submissions, Petitioner's clarifications thereto and the Commission's findings on the issue of RoE have not been repeated herein for the sake of brevity.

#### **TRUING UP OF ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD**

10. The details of the trued-up transmission charges claimed by the Petitioner in respect of the transmission asset are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
Depreciation	300.46	780.52
Interest on Loan	301.74	746.73
Return on Equity	333.68	869.06



Interest on working capital	26.20	66.49
O&M Expenses	118.93	293.10
<b>Total</b>	<b>1081.01</b>	<b>2755.90</b>

11. The details of the trued-up IWC claimed by the Petitioner in respect of the transmission asset are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
O&M Expenses	23.64	24.43
Maintenance Spares	42.56	43.97
Receivables	429.81	459.32
<b>Total</b>	<b>496.01</b>	<b>527.72</b>
Rate of Interest (%)	12.60	12.60
<b>Interest on Working Capital</b>	<b>62.50</b>	<b>66.49</b>

### Capital Cost

12. The Commission vide order dated 29.6.2018 in Petition No.196/TT/2017 had allowed the capital cost as on COD and ACE up to 31.3.2019. The details are as follows:

Approved Cost (FR)	Capital Cost allowed (as on COD)	ACE		Total Capital Cost (as on 31.3.2019)
		2017-18	2018-19	
24418.19	12433.55	1860.49	3004.22	17298.26

13. The Petitioner has submitted that the capital cost as on COD and estimated ACE incurred or projected to be incurred for the transmission asset as per Auditor's Certificate dated 31.7.2019 is as follows:

Apportioned Approved Cost (FR)	Capital Cost (as on COD)	ACE		Total Capital Cost (as on 31.3.2019)
		2017-18	2018-19	
24418.19	12732.01	1866.37	227.11	14825.49



### **Cost Over-run**

14. The Petitioner has claimed capital cost of ₹12732.01 lakh for the transmission asset as on COD.

15. The total completion cost including ACE in respect of the transmission asset is ₹14825.49 lakh and the approved cost is ₹24418.19 lakh. Hence, the completion cost in respect of the transmission asset is within the approved FR cost and, therefore, there is no cost over-run with regard to the transmission asset.

### **Time Over-run**

16. As per the IA, the transmission asset was scheduled to be put under commercial operation within 30 months from the date of IA, which is 12.1.2016. Accordingly, the scheduled date of commercial operation was 12.7.2018 against which the transmission asset was put into commercial operation on 30.10.2017. Therefore, there is no time over-run in commercial operation of the transmission asset.

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

17. The Petitioner has claimed IDC in respect of the transmission asset and has submitted the Auditor's Certificates dated 31.7.2019 in support of the same. The Petitioner has submitted the computation of IDC along with year-wise details of the IDC discharged.

18. The allowable IDC has been worked out considering the information submitted by the Petitioner in respect of the transmission asset separately on cash basis. The loan details submitted in Form-9C for 2014-19 tariff period and IDC computation





sheet have been considered for the purpose of IDC calculation on cash basis and accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged.

19. 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 Discharged (as on COD)	IDC Un-discharged (as on COD)	IDC Discharged	
				2017-18	2018-19
A	B	C	D=B-C		
458.66	458.66	160.20	298.46	198.05	100.41

20. The Petitioner has claimed IEDC of ₹184.24 lakh for the transmission asset and has submitted Auditor's Certificate in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the transmission asset. Accordingly, IEDC of ₹184.24 lakh has been allowed for the transmission asset.

### **Initial Spares**

21. Initial Spares are provided in Regulation 13(d) of the 2014 Tariff Regulations subject to the following ceiling norms:

- “(d) Transmission system*  
*(i) Transmission line – 1.00%*  
*(ii) Transmission Sub-station (Green Field) – 4.00%*  
*(iii) Transmission Sub-station (Brown Field) – 6.00%*  
*(iv) Series Compensation devices and HVDC Station – 4.00%*  
*(v) Gas Insulated Sub-station (GIS) – 5.00%*  
*(vi) Communication system – 3.5%*  
 .....

22. The Petitioner has claimed the Initial Spares in respect of the transmission asset as follows:



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(₹ in lakh)

Particulars	Estimated Completion Cost (A)	Initial Spares Claimed (B)	Ceiling Limit (in %) (C)	Initial Spares Worked Out	Excess Initial Spares
				$D=[(A-B)*C/(100-C)]$	
Sub-station	2243.75	134.49	6.00	134.63	0.00
Transmission Line	13474.24	134.00	1.00	134.75	0.00

23. We have considered the submissions of the Petitioner. The Initial Spares are allowable subject to the ceiling specified in Regulation 13(d) of the 2014 Tariff Regulations. The Petitioner's claim of Initial Spares is within the ceiling specified in Regulation 13(d) of the 2014 Tariff Regulations. Accordingly, the details of the Initial Spares allowed in respect of the transmission asset for the 2014-19 tariff period are as follows:

**Sub-station**

(₹ in lakh)

P&M cost considered as on cut- off date	Initial Spares claimed	Norms as per 2014 Tariff Regulations (in %)	Initial Spares allowable as per 2014 Tariff Regulations	Initial Spares allowed	Discharge of Initial Spares
					As on COD
2243.75	134.49	6.00	134.63	134.49	134.49

**Transmission Line**

(₹ in lakh)

P&M cost considered as on cut- off date	Initial Spares claimed	Norms as per 2014 Tariff Regulations (in %)	Initial Spares allowable as per 2014 Tariff Regulations	Initial Spares allowed	Discharge of Initial Spares
					As on COD
13474.24	134.00	1.00	134.75	134.00	134.00

**Capital Cost allowed as on COD**

24. Accordingly, the capital cost allowed as on COD is summarized as follows:

(₹ in lakh)

Capital Cost (as on	Less: IDC as on COD due to	Less: Disallowed IEDC	Less: Excess Initial Spares	Capital Cost (as on COD-



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COD as per Auditor's Certificate)	IDC Disallowed	Un-discharged IDC		Disallowed	on cash basis)
12732.01	0.00	298.46	0.00	0.00	12433.55

**Additional Capital Expenditure (ACE)**

25. The Commission vide order dated 29.6.2018 in Petition No.196/TT/2017 had allowed ACE in respect of the transmission asset for the 2014-19 tariff period as follows:

Particulars	(₹ in lakh)	
	2017-18	2018-19
ACE	1860.49	3004.22

26. The Petitioner has claimed the following ACE and has submitted Auditor's Certificate dated 31.7.2019 in support of the same:

Particulars	(₹ in lakh)	
	2017-18	2018-19
ACE	1866.37	227.11

27. The Petitioner has submitted that ACE in 2014-19 has been claimed under Regulations 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations and the same is within the cut-off date.

28. We have considered the submissions of Petitioner. The un-discharged IDC as on COD have been allowed as ACE during the year of discharge. ACE claimed by the Petitioner has been allowed under Regulations 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations which pertain to balance and retention payment due to un-discharged liabilities for works executed before cut-off date/ work deferred for execution. Accordingly, ACE allowed for the 2014-19 tariff period is as follows:

Particulars	(₹ in lakh)	
	ACE Allowed	
	2017-18	2018-19
Balance & Retention Payment for liabilities	991.72	56.40



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Work deferred for execution	874.65	170.71
IDC Discharged after COD	198.05	100.41

29. The capital cost allowed vide order dated 29.6.2018 in Petition No. 196/TT/2017, claimed in the instant petition and trued-up capital cost approved as on 31.3.2019 after inclusion of ACE in respect of the transmission asset is as follows :

(₹ in lakh)

Particulars	Capital cost as on COD on cash basis	ACE 2017-18	ACE 2018-19	Total Capital cost including ACE as on 31.3.2019
Allowed vide order dated 29.6.2018 in Petition No. 196/TT/2017	12433.55	1860.49	3004.22	17298.26
Claimed by the Petitioner in the instant petition	12732.01	1866.37	227.11	14825.49
Approved after truing up in this Order	12433.55	2064.43	327.52	14825.50

#### **Debt-Equity Ratio**

30. The Petitioner has claimed debt-equity ratio of 70:30 as on COD and for ACE. The debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of debt-equity ratio in respect of the transmission asset as on COD and 31.3.2019 are as follows:

Funding	Capital Cost (as on COD) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2019) (₹ in lakh)	(in %)
Debt	8703.49	70.00	10377.86	70.00
Equity	3730.06	30.00	4447.65	30.00
<b>Total</b>	<b>12433.55</b>	<b>100.00</b>	<b>14825.50</b>	<b>100.00</b>

#### **Depreciation**

31. The depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during the 2014-



19 tariff period. The Gross Block during the 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD). WAROD at Annexure-I has been worked out after taking into account the depreciation rates of asset as specified in the 2014 Tariff Regulations and depreciation allowed during the 2014-19 tariff period is as under:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
Opening Gross Block	12433.55	14497.98
ACE	2064.43	327.52
Closing Gross Block	14497.98	14825.50
Average Gross Block	13465.77	14661.74
Weighted average rate of Depreciation (WAROD) (in %)	5.29	5.29
Lapsed useful life of the Asset-at the beginning of the year (Year)	0	0
Balance useful life of the Asset - at the beginning of the year (Year)	33	33
Aggregated Depreciable Value	12119.19	13195.57
<b>Depreciation during the year</b>	<b>298.44</b>	<b>775.29</b>
Remaining Aggregated Depreciable Value	11820.75	12121.84

32. The details of the depreciation allowed in respect of the transmission asset vide order dated 29.6.2018 in Petition no.196/TT/2017, as claimed by the Petitioner in the instant petition and as trued-up in the instant order are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
Allowed vide order dated 29.6.2018 in Petition No. 196/TT/2017	295.88	833.55
Claimed by the Petitioner in the instant petition	300.47	780.52
Approved after true-up in this order	298.44	775.29

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

33. The Petitioner has claimed the Weighted Average Rate of IoL based on its actual loan portfolio and rate of interest. Accordingly, IoL is calculated based on



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actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations.

The details of IoL allowed are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
Gross Normative Loan	8703.49	10148.59
Cumulative Repayments up to Previous Year	0.00	298.44
Net Loan-Opening	8703.49	9850.15
Addition due to ACE	1445.10	229.26
Repayment during the year	298.44	775.29
Net Loan-Closing	9850.15	9304.13
Average Loan	9276.82	9577.14
Weighted Average Rate of Interest on Loan (in %)	7.76	7.80
<b>Interest on Loan</b>	<b>301.78</b>	<b>747.09</b>

34. The details of IoL allowed vide order dated 29.6.2018 in Petition No. 196/TT/2017, claimed by the Petitioner in the instant petition and true-up in this order are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 27 days)	2018-19
Allowed vide order dated 29.6.2018 in Petition No. 196/TT/2017	300.22	804.03
Claimed by the Petitioner in the instant petition	301.74	746.73
Approved after true-up in this order	301.78	747.09

### Return on Equity (RoE)

35. The Petitioner has claimed RoE in respect of the transmission asset in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed the following effective tax rates for the 2014-19 tariff period:

Year	Claimed effective tax (in %)	Grossed up RoE [(Base Rate)/(1-t)] (in %)
2014-15	21.018	19.625



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2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

36. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is as follows:

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

37. The MAT rates as allowed vide order dated 27.4.2020 in Petition No. 274/TT/2019 for the purpose of grossing up of the rate of RoE for trueing up of the tariff of 2014-19 period in terms of the provisions of the 2014 Tariff Regulations are considered in the instant case which are as follows:

Year	MAT Rate (%)	Grossed-up RoE (in %) [(Base Rate)/(1-t)]
2014-15	20.961	19.610
2015-16	21.342	19.705
2016-17	21.342	19.705
2017-18	21.342	19.705
2018-19	21.549	19.758

38. Accordingly, RoE allowed in respect of the transmission asset is as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
Opening Equity	3730.06	4349.39
Addition due to ACE	619.33	98.26
Closing Equity	4349.39	4447.65
Average Equity	4039.72	4398.52
Return on Equity (Base Rate) (in %)	15.500	15.500
Tax Rate applicable (in %)	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.758



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Particulars	2017-18 (Pro-rata for 153 days)	2018-19
Return on Equity (Pre-tax)	333.68	869.06

39. The details of RoE allowed vide order dated 29.6.2018 in Petition No.196/TT/2017, as claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
Allowed vide order dated 29.6.2018 in Petition No.196/TT/2017	329.55	929.29
Claimed by the Petitioner in the instant petition	333.68	869.06
Approved after true-up in this order	333.68	869.06

#### **Operation & Maintenance Expenses (O&M Expenses)**

40. The Commission vide RoP for hearing dated 10.9.2021 had directed the Petitioner to clarify the configuration and length of the line as mentioned in Petition No. 196/TT/2017 and in the present petition and the reasons for the deviation. In response, the Petitioner vide affidavit dated 4.10.2021 has submitted that at the time of determination of tariff for the 2014-19 tariff period vide order dated 29.6.2018 in Petition No.196/TT/2017, the length of the line was projected as 20.18 km {17.36 km (DC) and 2.82 km (MC)} and the O&M expenses were claimed accordingly. The Commission vide order dated 29.6.2018 in Petition No.196/TT/2017 had admitted the O&M expenses for 20.18 km [17.36 km (DC) and 2.82 km (MC)].

41. We have considered the submissions of the petitioner. We have perused the CEA energization certificate dated 26.10.2017, wherein the total length of the line is mentioned as 22.650 km and the Petitioner had submitted the same CEA energization certificate in Petition No.196/TT/2017 also. Taking cognizance of the



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CEA energization certificate, the line length of 22.65 km [18.24 km (DC) and 4.41 km (MC)] is considered for determination of O&M expenses. The details of the O&M Expenses allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of tariff are as follows:

(₹ in lakh)		
Particulars	2017-18 (Pro-rata for 153 days)	2018-19
<b>Transmission Line</b>		
LILO of Mundra Umpp-Limbdi	18.24	18.24
LILO of Mundra Umpp-Limbdi	4.41	4.41
<b>Norm (₹ lakh/ km)</b>		
D/C Twin/Triple Conductor	0.78	0.81
M/C Twin/Triple Conductor	1.37	1.41
<b>Total Transmission Expenses</b>	<b>20.26</b>	<b>20.93</b>
<b>Sub-station</b>		
Bachau: Mundra Bay I and Bay II	2	2
Bachau: Limbdi Bay I and Bay II	2	2
<b>Norm (₹ lakh/ bay)</b>		
400 kV	66.51	68.71
<b>Total Sub-station Expenses</b>	<b>266.04</b>	<b>274.84</b>
<b>Total O&amp;M Expenses</b>	<b>120.01</b>	<b>295.77</b>

42. The details of O&M Expenses allowed vide order dated 29.6.2018 in Petition No.196/TT/2017, O&M Expenses claimed by the Petitioner in the instant petition and true-up O&M Expenses allowed in the instant order are as follows:

(₹ in lakh)		
Particulars	2017-18 (Pro-rata for 153 days)	2018-19
Allowed vide order dated 29.6.2018 in Petition No.196/TT/2017	118.79	292.51
Claimed by the Petitioner in the instant petition	118.92	293.10
Approved after true-up in this order	120.01	295.77

#### **Interest on Working Capital (IWC)**

43. The Petitioner has claimed IWC in terms of Regulation 28 of the 2014 Tariff Regulations. The Petitioner is entitled to IWC as per Regulation 28 of the 2014 Tariff



Regulations.

44. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and the same is allowed in respect of the transmission asset as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153days)	2018-19
Working Capital for O&M Expenses (O&M Expenses for One month)	23.86	24.65
Working Capital for Maintenance Spares (15% of O&M Expenses)	42.95	44.37
Working Capital for Receivables (Equivalent to Two months of annual fixed cost /annual transmission charges)	429.46	458.96
<b>Total Working Capital</b>	<b>496.26</b>	<b>527.97</b>
Rate of Interest on working capital (in %)	12.60	12.60
<b>Interest on working Capital</b>	<b>26.21</b>	<b>66.52</b>

45. The details of IWC allowed vide order dated 29.6.2018 in Petition No.196/TT/2017, IWC claimed by the Petitioner and trued-up IWC allowed in the instant order is as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153days)	2018-19
Allowed vide order dated 29.6.2018 in Petition No.196/TT/2017	25.97	70.12
Claimed by the Petitioner in the instant petition	26.20	66.49
Approved after true-up in this order	26.21	66.52

**Approved Annual Fixed Charges for the 2014-19 Tariff Period**

46. The trued-up Annual Fixed Charges (AFC) approved in respect of the transmission asset for the 2014-19 tariff period are as follows:

Particulars	(₹ in lakh)	
	2017-18	2018-19



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	(Pro-rata for 153 days)	
Depreciation	298.44	775.29
Interest on Loan	301.78	747.09
Return on Equity	333.68	869.06
Operation and Maintenance	120.01	295.77
Interest on Working Capital	26.21	66.52
<b>Total</b>	<b>1080.12</b>	<b>2753.74</b>

47. Accordingly, AFC allowed vide order dated 29.6.2018 in Petition No. 196/TT/2017, trued-up AFC claimed by the Petitioner in the instant petition and trued-up AFC approved in the instant order are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153days)	2018-19
Allowed vide order dated 29.6.2018 in Petition No.196/TT/2017	1070.51	2929.50
Claimed by the Petitioner in the instant petition	1081.01	2755.90
Approved after true-up in this order	1080.12	2753.74

#### **DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD**

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	833.73	878.26	878.26	878.26	878.26
Interest on Loan	744.10	723.25	653.39	583.57	513.95
Return on Equity	929.66	980.55	980.55	980.55	980.55
Interest on Working Capital	44.37	45.83	45.02	44.21	43.30
O&M Expenses	152.86	158.09	163.49	169.08	174.85
<b>Total</b>	<b>2704.72</b>	<b>2785.98</b>	<b>2720.71</b>	<b>2655.67</b>	<b>2590.91</b>

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for One month)	12.74	13.17	13.62	14.09	14.57



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Working Capital for Maintenance Spares (15% of O&M Expenses)	22.93	23.71	24.52	25.36	26.23
Working Capital for Receivables (Equivalent to Two months of annual fixed cost /annual transmission charges)	332.55	343.48	335.43	327.41	318.56
<b>Total Working Capital</b>	<b>368.22</b>	<b>380.36</b>	<b>373.57</b>	<b>366.86</b>	<b>359.36</b>
Rate of Interest on working capital (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on working Capital</b>	<b>44.37</b>	<b>45.83</b>	<b>45.02</b>	<b>44.21</b>	<b>43.30</b>

### Capital Cost

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

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

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

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



environment clearance for the project;

(n) Expenditure on account of change in law and force majeure events;  
and

(o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

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

(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;

(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;

(c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and

(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”

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

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

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

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

(a) The Asset-forming part of the project, but not in use, as declared in the tariff petition;

(b) De-capitalised Asset-after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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



concerned asset.

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

51. The Petitioner has claimed the capital cost of ₹14825.49 lakh as on 31.3.2019 in respect of the transmission asset. The same has been worked out by the Commission as on 31.3.2019 and is, therefore, considered as the opening capital cost as on 1.4.2019 for determination of tariff for the 2019-24 period in accordance with Regulation 19 of the 2019 Tariff Regulations.

#### **Additional Capital Expenditure (ACE)**

52. Regulations 24 and 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 cutoff date may be admitted by the Commission, subject to prudence check:*

*a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*

*b) Change in law or compliance of any existing law;*

*c) Deferred works relating to ash pond or ash handling system in the original scope of work;*

*d) Liability for works executed prior to the cut-off date;*

*e) Force Majeure events;*

*f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and g) Raising of ash dyke as a part of ash disposal system.*

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

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

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

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

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

53. The Petitioner has projected ACE for 2019-20 period on account of balance and retention payments due to undischarged liability projected for works executed





within the cut-off date and unexecuted works within cuff-off date. The details of the projected ACE in respect of the transmission asset are as follows:

Particulars	(₹ in lakh)
	2019-20
ACE	1717.09

54. We have considered the submissions of the Petitioner. ACE claimed on account of balance and retention payments and deferred works is allowed under Regulation 24(1)(a) of the 2019 Tariff Regulations subject to truing-up as follows:

Particulars	(₹ in lakh)
	ACE 2019-20
Balance & Retention Payment	1717.09

#### **Capital Cost for the 2019-24 Tariff Period**

55. Capital cost of the transmission asset considered for the 2019-24 tariff period is as follows:

Capital Cost (as on 1.4.2019)	Admitted ACE	Capital Cost (as on 31.3.2024)
	2019-20	
14825.50	1717.09	16542.59

#### **Debt-Equity Ratio**

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

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

Provided that:

- where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff;
- the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment;
- 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 utilized 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 modernization 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."

57. The details of debt-equity considered for the purpose of computation of tariff for the 2019-24 period for the transmission asset are as follows:



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Funding	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Total Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	10377.86	70.00	11579.82	70.00
Equity	4447.65	30.00	4962.77	30.00
<b>Total</b>	<b>14825.50</b>	<b>100.00</b>	<b>16542.59</b>	<b>100.00</b>

### Depreciation

58. 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."*

59. We have considered the submissions of the Petitioner. WAROD at Annexure-



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It has been worked out after taking into account the depreciation rates as specified in the 2019 Tariff Regulations. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed in respect of the transmission asset is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	14825.50	16542.59	16542.59	16542.59	16542.59
Addition during the year 2019 -24 due to projected ACE	1717.09	0.00	0.00	0.00	0.00
Closing Gross Block	16542.59	16542.59	16542.59	16542.59	16542.59
Average Gross Block	15684.05	16542.59	16542.59	16542.59	16542.59
Weighted average rate of Depreciation (WAROD) (%)	5.32	5.31	5.31	5.31	5.31
Lapsed useful life at the beginning of the year	1	2	3	4	5
Balance useful life at the beginning of the year (Year)	32	31	30	29	28
Aggregated Depreciable Value	14121.05	14893.74	14893.74	14893.74	14893.74
<b>Combined Depreciation during the year</b>	<b>833.73</b>	<b>878.25</b>	<b>878.25</b>	<b>878.25</b>	<b>878.25</b>
Aggregate Cumulative Depreciation at the end of the year	1907.46	2785.71	3663.96	4542.21	5420.46
Remaining Aggregate Depreciable Value at the end of the year	12213.59	12108.03	11229.78	10351.53	9473.28

### Interest on Loan (IoL)

60. 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”.*

61. The weighted average rate of interest of IoL has been considered on basis of rates prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, will be considered at the time of true-up. 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:



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(₹ in lakh)



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	10377.86	11579.82	11579.82	11579.82	11579.82
Cumulative Repayments up to Previous Year	1073.73	1907.46	2785.71	3663.96	4542.21
Net Loan-Opening	9304.13	9672.36	8794.11	7915.86	7037.61
Addition due to ACE	1201.96	0.00	0.00	0.00	0.00
Repayment during the year	833.73	878.25	878.25	878.25	878.25
Net Loan-Closing	9672.36	8794.11	7915.86	7037.61	6159.36
Average Loan	9488.25	9233.24	8354.99	7476.74	6598.49
Weighted Average Rate of Interest on Loan (in %)	7.848	7.839	7.827	7.813	7.798
<b>Interest on Loan</b>	<b>744.67</b>	<b>723.82</b>	<b>653.96</b>	<b>584.13</b>	<b>514.53</b>

### Return on Equity (RoE)

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

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

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

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

*Provided further that:*

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

*ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency*





continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:

- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

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

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

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

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

**Illustration-**

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

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



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(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 trueing up, shall be recovered or refunded to beneficiaries or the long-term customers, as the case may be, on year-to-year basis."

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	4447.65	4962.77	4962.77	4962.77	4962.77
Addition due to ACE	515.13	0.00	0.00	0.00	0.00
Closing Equity	4962.77	4962.77	4962.77	4962.77	4962.77
Average Equity	4705.21	4962.77	4962.77	4962.77	4962.77
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	17.470	17.470	17.470	17.470	17.470
Rate of Return on Equity (Pre-tax)	18.780	18.780	18.780	18.780	18.780
<b>Return on Equity (Pre-tax)</b>	<b>883.73</b>	<b>932.11</b>	<b>932.11</b>	<b>932.11</b>	<b>932.11</b>

### **Operation & Maintenance Expenses (O&M Expenses)**

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



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Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Transmission Line</b>					
LILO of Mundra UMPP-LIMBDI	18.24	18.24	18.24	18.24	18.24
LILO of Mundra UMPP-LIMBDI	4.41	4.41	4.41	4.41	4.41
<b>Norm (₹ lakh/km)</b>					
D/C Twin/Triple Conductor	0.881	0.912	0.944	0.977	1.011
M/C Twin/Triple Conductor	1.544	1.598	1.654	1.713	1.773
<b>Total Transmission Expense</b>	<b>22.88</b>	<b>23.68</b>	<b>24.51</b>	<b>25.37</b>	<b>26.26</b>
<b>Sub-station Bays</b>					
Bachau: Mundra Bay I and II	2	2	2	2	2
Bachau: Limbdi Bay I and II	2	2	2	2	2
<b>Norm (₹ lakh/bay)</b>					
400 kV	32.15	33.28	34.45	35.66	36.91
<b>Total Sub-station O&amp;M Expenses</b>	<b>128.60</b>	<b>133.12</b>	<b>137.80</b>	<b>142.64</b>	<b>147.64</b>
<b>Communication System</b>					
PLCC (₹ in lakh)	215.64	215.64	215.64	215.64	215.64
<b>Norms (in %)</b>	2	2	2	2	2
<b>Total Communication System</b>	<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	<b>4.31</b>	<b>4.31</b>
<b>Total O&amp;M Expenses</b>	<b>155.79</b>	<b>161.11</b>	<b>166.63</b>	<b>172.33</b>	<b>178.21</b>

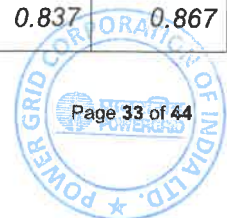
65. Regulations 35(3)(a) and 35(4) of the 2019 Tariff Regulations provide as follows:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<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



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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
<i>Norms for HVDC stations</i>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double  
Circuit quad AC line;



- iii. the O&M expenses of  $\pm 500$  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  $\pm 500$  kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of  $\pm 800$  kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for  $\pm 800$  kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of  $\pm 800$  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  $\pm 800$  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."

66. We have considered the submissions of the Petitioner. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the Sub- station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for Sub-station have been specified accordingly. Accordingly, the Commission vide order dated



Order in Petition No. 447/TT/2020





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.

67. The O&M Expenses allowed in respect of the transmission asset are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Transmission Line</b>					
LILO of Mundra UMPP-LIMBDI	18.24	18.24	18.24	18.24	18.24
LILO of Mundra UMPP-LIMBDI	4.41	4.41	4.41	4.41	4.41
<b>Norm (₹ lakh/km)</b>					
D/C Twin/Triple Conductor	0.881	0.912	0.944	0.977	1.011
M/C Twin/Triple Conductor	1.544	1.598	1.654	1.713	1.773
<b>Total Transmission Expense</b>	<b>22.88</b>	<b>23.68</b>	<b>24.51</b>	<b>25.37</b>	<b>26.26</b>
<b>Sub-station Bays</b>					
Bachau: Mundra Bay I and II	2	2	2	2	2
Bachau: Limbdi Bay I and II	2	2	2	2	2
<b>Norm (₹ lakh/bay)</b>					
400 kV	32.15	33.28	34.45	35.66	36.91
<b>Total Sub-station O&amp;M Expenses</b>	<b>128.60</b>	<b>133.12</b>	<b>137.80</b>	<b>142.64</b>	<b>147.64</b>
<b>Total O&amp;M Expenses</b>	<b>151.48</b>	<b>156.80</b>	<b>162.31</b>	<b>168.01</b>	<b>173.90</b>

#### **Interest on Working Capital (IWC)**

68. Regulations 34(1)(c), 34(3), 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**



Order in Petition No. 447/TT/2020

expenses including security expenses; and

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

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

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

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

“3. **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;”

69. The Petitioner has submitted that it has computed IWC for 2019-24 tariff period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20 and 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-24. The components of the working capital and interest allowed thereon in respect of the transmission asset are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M expenses for One month)	12.62	13.07	13.53	14.00	14.49



Order in Petition No. 447/TT/2020





Working Capital for Maintenance Spares (15% of O&M expenses)	22.72	23.52	24.35	25.20	26.08
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	326.71	336.95	328.57	320.58	311.78
<b>Total Working Capital</b>	<b>362.05</b>	<b>373.53</b>	<b>366.45</b>	<b>359.79</b>	<b>352.35</b>
Rate of Interest on Working Capital (in %)	12.05	11.25	10.50	10.50	10.50
<b>Interest on working capital</b>	<b>43.63</b>	<b>42.02</b>	<b>38.48</b>	<b>37.78</b>	<b>37.00</b>

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

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	833.73	878.25	878.25	878.25	878.25
Interest on Loan	744.67	723.82	653.96	584.13	514.53
Return on Equity	883.73	932.11	932.11	932.11	932.11
Operation and Maintenance	151.48	156.80	162.31	168.01	173.90
Interest on Working Capital	43.63	42.02	38.48	37.78	37.00
<b>Total</b>	<b>2657.23</b>	<b>2733.00</b>	<b>2665.11</b>	<b>2600.28</b>	<b>2535.78</b>

### **Filing Fee and Publication Expenses**

71. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 70(1) of the 2019 Tariff Regulations.

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



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

73. The Petitioner shall be entitled for reimbursement of license fee 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**

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

75. MPPMCL has submitted that the claim of GST is premature at this stage and need not be considered at this juncture.

76. In response PGCIL submitted that under CGST Act, 2017 implemented w.e.f. 1.7.2017, the Government of India has exempted the charges of transmission of electricity vide notification no. 12/2017 - Central Tax (Rate) dated Order in Petition No.8/TT/2020 Page 40 of 45 28.6.2017 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 claimed in the instant petition 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 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.

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

#### **Security Expenses**

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

79. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission asset owned by it on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been disposed of by the Commission vide order dated 3.8.2021. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

#### **Capital Spares**

80. 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.



Order in Petition No. 447/TT/2020



### Sharing of Transmission Charges

81. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. With effect from 1.11.2020, sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of the DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of the transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations

82. To summarise,

(a) The trued-up AFC approved in respect of the transmission asset for 2014-19 tariff period are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153days)	2018-19
Annual Fixed Charges	1080.12	2753.74

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charge	2657.23	2733.00	2665.11	2600.28	2535.78

83. Annexures-I and Annexure-II given hereinafter shall form part of the order.



Order in Petition No. 447/TT/2020



84. This order disposes of Petition No. 447/TT/2020 in terms of the above discussions and findings.

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

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

**sd/-  
(P.K. Pujari)  
Chairperson**



<b>Petition No.</b>	<b>447/TT/2020</b>
<b>Period</b>	<b>2014-19 Tariff</b>

**Annexure -- I**

**Asset-I**

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
		2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Building	55.62	0.89	0.45	56.97	3.34	-	-	-	1.88	1.90
Transmission Line	10450.94	1866.42	138.39	12455.75	5.28	-	-	-	601.08	654.01
Substation	1700.03	157.81	185.25	2043.09	5.28	-	-	-	93.92	102.98
PLCC	181.39	31.19	3.06	215.64	6.33	-	-	-	12.47	13.55
IT Equipment & Software	45.57	8.12	0.37	54.06	5.28	-	-	-	2.62	2.84
<b>TOTAL</b>	<b>12433.55</b>	<b>2064.43</b>	<b>327.52</b>	<b>14825.50</b>		-	-	-	<b>711.97</b>	<b>775.29</b>
				<b>Average Gross Block (₹ in lakh)</b>		-	-	-	13465.77	14661.74
				<b>Weighted Average Rate of Depreciation (%)</b>		-	-	-	5.29	5.29



Order in Petition No. 447/TT/2020



<b>Petition No.</b>	<b>447/TT/2020</b>
<b>Period</b>	<b>2019-24 Tariff</b>

**Annexure – II**

2019-24 Capital Expenditure as on 1.4.2019	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-20	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
					2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Building	56.97	83.08	140.05	3.34	3.29	4.68	4.68	4.68	4.68
Transmission Line	12455.75	1562.77	14018.52	5.28	698.92	740.18	740.18	740.18	740.18
Substation	2043.09	71.24	2114.33	5.28	109.76	111.64	111.64	111.64	111.64
PLCC	215.64	0.00	215.64	6.33	13.65	13.65	13.65	13.65	13.65
IT Equipment & Software	54.06	0.00	54.06	15.00	8.11	8.11	8.11	8.11	8.11
<b>TOTAL</b>	<b>14825.50</b>	<b>1717.09</b>	<b>16542.59</b>		<b>833.73</b>	<b>878.25</b>	<b>878.25</b>	<b>878.25</b>	<b>878.25</b>
			<b>Average Gross Block (₹ in lakh)</b>		15684.05	16542.59	16542.59	16542.59	16542.59
			<b>Weighted Average Rate of Depreciation (%)</b>		5.32	5.31	5.31	5.31	5.31

**ATTESTED TRUE COPY**

*(Signature)*  
28-7

Authorised Signatory

Power Grid Corporation of India Ltd  
Plot No. 2, Sector-29, Gurgaon-122001 (HARYANA)



Liability Flow Statement

DOCO: 30.10.2017

LILLO of both Circuits of 400 kV D/C Mundra UMPP - Limbdi (Tripple Snow/bird) TL along with 4 nos 400 kV line bays at Bhachau Sub-Station

Name of Petitioner  
Project Name

MUNDRA UMPP (PART A)

Name of Asset:

Asset No.	Headwise /Partywise	Particulars*	Year of Actual Capitalisation	Outstanding Liability as on COD/31.03 2019	Discharge				Outstanding Liability as on 31.3 2024
					2019-20	2020-21	2021-22	Total (19-24)	
	- Due to Unexecuted Work								
	Others(CROPLAND/FREE)	Building & Civil Works	2017-18						
	KEC	Transmission Line	2017-18						
	TECHNO	Sub-Station	2017-18		(47.73)			(47.73)	
		I. T. Equipment including software	2017-18						
	- Due to Discharge of Liability								
	Others(CROPLAND/FREE)	Building & Civil Works	2017-18	19.80	19.80			19.80	
	KEC	Transmission Line	2017-18	26.66	3.01	23.65		26.66	
	TECHNO	Sub-Station	2017-18	13.89	13.89			13.89	
		I. T. Equipment including software	2017-18	41.86	36.01	5.85		41.86	
	Total			102.21	24.98	29.50		54.48	

*Handwritten signature*



**G.D. Apte & Co.**  
Chartered Accountants

**CERTIFICATE**


This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost for "LILO of both Circuits of 400 kV D/C Mundra UMPP - Limbdi (Tripple Snowbird) TL along with 4 nos. 400 kV line bays at Bhachau Sub Station", under "Transmission System Strengthening associated with MUNDRA UMPP (PART A)" in Western Region - II of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 30.10.2017 is detailed as under:

(Rs. in Lakhs)

S/N	Particulars	Capital Cost	IEDC	IDC	Total
1	Expenditure up to 31.03.2017	7036.97	82.57	105.26	7224.80
2	Expenditure from 01.04.2017 to 29.10.2017(DOCO)	5052.14	101.67	353.40	5507.21
3	Expenditure from 30.10.2017 to 31.03.2018	1866.37	0.00	0.00	1866.37
4	Expenditure from 01.04.2018 to 31.03.2019	227.11	0.00	0.00	227.11
5	Expenditure from 01.04.2019 to 31.03.2020	24.98	0.00	0.00	24.98
6	Expenditure from 01.04.2020 to 31.03.2021	29.50	0.00	0.00	29.50
	<b>Total</b>	<b>14237.07</b>	<b>184.24</b>	<b>458.66</b>	<b>14879.97</b>

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

For G.D. Apte & Co.  
Chartered Accountants  
Firm Registration Number: 100 515W  
UDIN: 24121007BKCKWO3160

  
Anagha M. Nanivadekar  
Partner  
Membership Number: 121007  
Pune, October 01, 2024



**Note:**

1. Recovery of ₹ 47.73 Lakhs has been done from the contractors which includes Liquidated Damages of ₹ 2.31 Lakhs and the same has been reduced from capital cost of FY 2019-20.

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



**G.D. Apte & Co.**  
Chartered Accountants

**CERTIFICATE**

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost for "LILO of both Circuits of 400 kV D/C Mundra UMPP - Limbdi (Tripple Snowbird) TL along with 4 nos. 400 kV line bays at Bhachau Sub Station", under "Transmission System Strengthening associated with MUNDRA UMPP (PART A)" in Western Region - II of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 30.10.2017 is detailed as under:

(Rs. in Lakhs)

S/N	Particulars	Land	Building and Civil Works	Tr. Line	Sub-Station	PLCC/ Communication System	I. T Equipment including software	Total
1	Expenditure up to 31.03.2017	0.00	56.97	5,880.38	1,062.23	178.56	46.66	7,224.80
2	Expenditure from 01.04.2017 to 29.10.2017(DOCO)	0.00	0.00	4,821.43	678.60	7.18	0.00	5,507.21
3	Expenditure from 30.10.2017 to 31.03.2018	0.00	0.00	1,699.95	130.73	28.30	7.39	1,866.37
4	Expenditure from 01.04.2018 to 31.03.2019	0.00	0.00	53.99	171.52	1.60	0.00	227.11
5	Expenditure from 01.04.2019 to 31.03.2020	0.00	19.80	16.90	-11.72	0.00	0.00	24.98
6	Expenditure from 01.04.2020 to 31.03.2021	0.00	23.65	-	5.85	0.00	0.00	29.50
	<b>Total</b>	<b>0.00</b>	<b>100.42</b>	<b>12,472.65</b>	<b>2,037.21</b>	<b>215.64</b>	<b>54.05</b>	<b>14,879.97</b>



*W/S*

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Email: [audit@gdaca.com](mailto:audit@gdaca.com)  
Mumbai Office: D-509 Neelkanth Business Park, Nathani Road, Vidyavihar (West) Mumbai 400086, Phone-022-3512 3184



**G.D. Apte & Co.**  
Chartered Accountants

S/N	Particulars	TL	Sub-station / PLCC	IT Equipment
1	Total Cost (Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of Civil works for the purpose of Initial Spares)	11928.38	2164.28	54.05
2	Initial Spares included above	134.00	134.49	0.00

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

For G.D. Apte & Co.  
Chartered Accountants  
Firm Registration Number: 100 515W  
UDIN: 24121007BKCKWO3160



Anagha M. Nanivadekar  
Partner  
Membership Number: 121007  
Pune, October 01, 2024



**Note:**

1. Recovery of ₹ 47.73 Lakhs has been done from the contractors which includes Liquidated Damages of ₹ 2.31 Lakhs and the same has been reduced from capital cost of FY 2019-20.



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Email: [audit@gdaca.com](mailto:audit@gdaca.com)  
Mumbai Office: D-509 Neelkanth Business Park, Nathani Road, Vidyavihar (West) Mumbai 400086, Phone-022-3512  
3184



Encl-4

**Summary of Tariff**

Form No. - 1

Name of the Transmission Licensee:		Power Grid Corporation of India Limited	
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOCO Date	Oct 30, 2017

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Year Days	366.00	365.00	365.00	365.00	366.00
Tariff Days	366.00	365.00	365.00	365.00	366.00
Depreciation-Form No. 10A	788.63	789.64	790.18	790.18	790.18
Interest on Loan-Form No. 9E	693.28	610.57	546.79	498.83	448.37
Return on Equity-Form No. 8	834.95	836.48	837.31	837.31	837.31
Int. on Working capital-Form No.11	41.44	37.84	34.67	34.26	38.63
Op. and maintenance-Form No.2	151.48	156.80	162.31	168.01	173.90
Total AFC	2,509.78	2,431.33	2,371.26	2,328.59	2,288.39

  
(Petitioner)





Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOCO Date	Oct 30, 2017

**1. Transmission Lines**

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/ HVDC	S/C or D/C	No of Sub-Conductors	Voltage Level KV	Line Bays	Line Reactor (Including Switchable Reactor)	Line Length Km	Date of Commercial operation	Covered in the present petition	
									Yes/No	If No, Petition No.
LILO OF MUNDRA UMPP-LIMBDI LINE (D/C) PORTION	AC	DC	3	400 KV	0.000	0.000	18.240	Oct 30, 2017	Y	
LILO OF MUNDRA-LIMBDI LINE (M/C) PORTION	AC	MC	3	400 KV	4.000	0.000	4.410	Oct 30, 2017	Y	

**Summary:**

O&M Expenses For the Transmission Lines Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
	<b>DOUBLE CIRCUIT (TRIPLE CONDUCTOR)</b>				
Normative Rate of O&M as per Regulation	0.881	0.912	0.944	0.977	1.011
No. of Units - (Length in KM )	18.24	18.24	18.24	18.24	18.24



O&M Claimed	16.07	16.63	17.22	17.82	18.44
<b>MULTICIRCUIT WITH THREE CONDUCTORS</b>					
Normative Rate of O&M as per Regulation	1.544	1.598	1.654	1.713	1.773
No. of Units - ( Length in KM )	4.41	4.41	4.41	4.41	4.41
O&M Claimed	6.81	7.05	7.29	7.55	7.82

*MS*



## 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			
Bhachau:400 KV MUNDRA BAY I AND II AT BHACHAU	Conventional	400 KV		2.000									Oct 30, 2017	Y
Bhachau:400 KV LIMBDI BAYS I AND II AT BHACHAU	Conventional	400 KV		2.000									Oct 30, 2017	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	32.15	33.28	34.45	35.66	36.91
No. of Units	4.00	4.00	4.00	4.00	4.00
O&M Claimed	128.60	133.12	137.80	142.64	147.64



*W/S*

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	22.88	23.68	24.51	25.37	26.26
Substation	128.60	133.12	137.80	142.64	147.64
Communication System	0.00	0.00	0.00	0.00	0.00
<b>Total Normative O&amp;M</b>	<b>151.48</b>	<b>156.80</b>	<b>162.31</b>	<b>168.01</b>	<b>173.90</b>
<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
<b>Total O&amp;M</b>	<b>151.48</b>	<b>156.80</b>	<b>162.31</b>	<b>168.01</b>	<b>173.90</b>

(Petitioner)



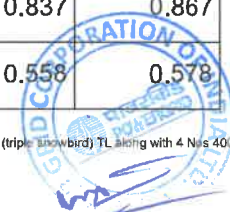
**Normative parameters considered for tariff computations**

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOC Date	Oct 30, 2017

(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)





**Statement of Capital cost**

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOCO Date	Oct 30, 2017

(Amount in Rs. Lakh)

## A) Capital Cost

Particular	Accrual Basis	Un-discharged Liabilities	Cash Basis
<b>As on relevant date :2019-20</b>			
a) Opening Gross Block Amount as per books	14,907.92	102.21	14,805.71
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	184.24	0.00	184.24
<b>As on relevant date :2020-21</b>			
a) Addition in Gross Block Amount during the period	-47.73	0.00	-47.73
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00
a) Closing Gross Block Amount as per books	14,860.19	29.50	14,830.69
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	184.24	0.00	184.24
<b>As on relevant date :2020-21</b>			
a) Opening Gross Block Amount as per books	14,860.19	29.50	14,830.69
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	458.66	0.00	458.66

c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	184.24	0.00	184.24
<b>a) Addition in Gross Block Amount during the period</b>			
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	184.24	0.00	184.24

**As on relevant date :2021-22**

a) Opening Gross Block Amount as per books,	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	184.24	0.00	184.24

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

a) Closing Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	184.24	0.00	184.24

**As on relevant date :2022-23**

a) Opening Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	184.24	0.00	184.24



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

a) Closing Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in C(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	184.24	0.00	184.24

**As on relevant date :2023-24**

a) Opening Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in A(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	184.24	0.00	184.24

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

a) Closing Gross Block Amount as per books .	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in C(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	184.24	0.00	184.24

B) Flow of liability for the Asset

(Amount in Rs. Lakh)

Particular	2019-2020	2020-2021				
Opening balance of liability	102.21	29.50	0.00	0.00	0.00	0.00
Add: Liability from ACE	0.00	0.00	0.00	0.00	0.00	0.00



Discharge of liability by payment and claimed as ACE	72.71	29.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversal/cancelation (to be entered)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing Balance of Admitted liability	29.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*[Handwritten Signature]*  
(Petitioner)



**Financial Package upto COD**

Form No. - 6

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOC Date	Oct 30, 2017

(Amount in Rs. Lakh)

Particulars	Financial Package as Approved		Financial Package as on COD 01/04/2019		As Admitted on COD 01/04/2019	
	Currency	Amount	Currency	Amount	Currency	Amount
Loans		0.00		0.00		0.00
Loan-Domestic		0.00		0.00		0.00
Loan-Foreign		0.00		0.00		0.00
Total Loans	INR	10,398.91	INR	10,364.00		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	4,456.66	INR	4,441.71		0.00
Total Equity	INR	4,456.66	INR	4,441.71		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	14,855.57	INR	14,805.71		0.00

Particulars	Debt	Equity	Total
Addcap for 2019 - 2020			24.98
Addcap for 2020 - 2021			29.50
Addcap for 2021 - 2022			0.00
Addcap for 2022 - 2023			0.00



*[Handwritten Signature]*

Addcap for 2023 - 2024			0.00
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Particulars	Actual	Normative	
<b>Addcap for 2019 - 2020</b>			
Equity		7.49	
Debt		17.49	
Total		24.98	
<b>Addcap for 2020 - 2021</b>			
Equity		8.85	
Debt		20.65	
Total		29.50	
<b>Addcap for 2021 - 2022</b>			
Equity		0.00	
Debt		0.00	
Total		0.00	
<b>Addcap for 2022 - 2023</b>			
Equity		0.00	
Debt		0.00	
Total		0.00	
<b>Addcap for 2023 - 2024</b>			
Equity		0.00	
Debt		0.00	
Total		0.00	
<b>Total Capital cost with Addcap</b>		14,860.19	





**Statement of Additional Capitalisation after COD**

Form No. - 7

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOCOC Date	Oct 30, 2017

(Amount in Rs. Lakh)

Particulars	Addition into Gross Block as per books of Account during the year (2)	De-Cap into Gross Block as per books of Account during the year	Less: Deductions dr. the year towards				Add: Discharge of earlier admitted liability	ACE on cash basis for tariff purpose	Admitted Cost in final tariff (Rs Lakh)
			Grants Received (if any) (3)	Asset pertaining to other businesses (If any) (4)	Other Deduction (if any) (5)	Less: Undischarged liability included in (2-4-5)			
<b>ACE for the year :2019-20 (Actual/Projected)</b>									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	19.80	19.80	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	16.90	16.90	0.00
Substations	-47.73	0.00	0.00	0.00	0.00	0.00	36.01	-11.72	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>-47.73</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>72.71</b>	<b>24.98</b>	<b>0.00</b>
<b>ACE for the year :2020-21 (Actual/Projected)</b>									



Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	23.65	23.65	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	5.85	5.85	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>29.50</b>	<b>29.50</b>	<b>0.00</b>
<b>ACE for the year :2021-22 (Actual/Projected)</b>									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>ACE for the year :2022-23 (Actual/Projected)</b>									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>ACE for the year :2023-24 (Actual/Projected)</b>									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

WA

(Petitioner)



Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)	
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s	
Region	Western Region	DOC Date   Oct 30, 2017

(Amount in Rs. Lakh)

	Actual/Projected						Admitted					
	2019-20	2020-21	2021-22	2022-23	2023-24		2019-20	2020-21	2021-22	2022-23	2023-24	
<b>Financial Year ( Starting of COD)</b>												
Amount capitalized in Work/ Equipment												
<b>Financing Details</b>												
Total Loan	17.49	20.65	0.00	0.00	0.00							
Equity	7.49	8.85	0.00	0.00	0.00							
Total	24.98	29.50	0.00	0.00	0.00							



(Petitioner)

### Calculation of ROE

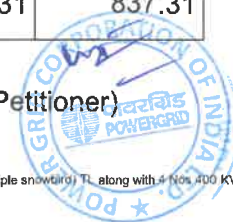
Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOCO Date	Oct 30, 2017

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the year	366.00	365.00	365.00	365.00	366.00
No. of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
Opening Normative Equity	4,441.71	4,449.20	4,458.05	4,458.05	4,458.05
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)	4,441.71	4,449.20	4,458.05	4,458.05	4,458.05
Add: Increase in Equity due to addition during the year / period	-14.31	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	21.80	8.85	0.00	0.00	0.00
Closing Normative Equity	4,449.20	4,458.05	4,458.05	4,458.05	4,458.05
Average Normative Equity	4,445.46	4,453.63	4,458.05	4,458.05	4,458.05
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	834.95	836.48	837.31	837.31	837.31
Pro rata return on Equity	834.95	836.48	837.31	837.31	837.31

(Petitioner)





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

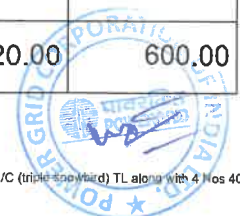
Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)				
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s				
Region	Western Region	DOC Date	Oct 30, 2017		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>SBI (2014-15) -ADDCAP 2017-18</b>					
Gross Loan- Opening	901.20	901.20	901.20	901.20	901.20
Cumulative repayments of Loans upto previous year	0.00	90.12	180.24	270.36	360.48
Net loan-Opening	901.20	811.08	720.96	630.84	540.72
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	90.12	90.12	90.12	90.12	90.12
Net Loan-Closing	811.08	720.96	630.84	540.72	450.60
Average Net Loan	856.14	766.02	675.90	585.78	495.66
Rate of Interest on Loan on Annual Basis	7.993319	6.894349	6.65	7.243625	8.135644
Interest on loan	68.434	52.8121	44.9474	42.4317	40.3251

<b>SBI (2014-15) -DOC 4</b>					
Gross Loan- Opening	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00
Cumulative repayments of Loans upto previous year	0.00	120.00	240.00	360.00	480.00
Net loan-Opening	1,200.00	1,080.00	960.00	840.00	720.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	120.00	120.00	120.00	120.00	120.00
Net Loan-Closing	1,080.00	960.00	840.00	720.00	600.00



Average Net Loan	1,140.00	1,020.00	900.00	780.00	660.00
Rate of Interest on Loan on Annual Basis	7.993319	6.894349	6.65	7.243625	8.135644
Interest on loan	91.1238	70.3224	59.85	56.5003	53.6953

### BOND LIII -DOCO 1

Gross Loan- Opening	580.00	580.00	580.00	580.00	580.00
Cumulative repayments of Loans upto previous year	0.00	0.00	48.33	96.67	145.00
Net loan-Opening	580.00	580.00	531.67	483.33	435.00
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	48.33	48.33	48.33	48.33
Net Loan-Closing	580.00	531.67	483.34	435.00	386.67
Average Net Loan	580.00	555.84	507.51	459.17	410.84
Rate of Interest on Loan on Annual Basis	8.13	8.13	8.13	8.13	8.13
Interest on loan	47.154	45.1898	41.2606	37.3305	33.4013

### BOND LIV -DOCO 2

Gross Loan- Opening	754.00	754.00	754.00	754.00	754.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	251.33	251.33
Net loan-Opening	754.00	754.00	754.00	502.67	502.67
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	251.33	0.00	0.00
Net Loan-Closing	754.00	754.00	502.67	502.67	502.67
Average Net Loan	754.00	754.00	628.34	502.67	502.67
Rate of Interest on Loan on Annual Basis	7.97	7.97	7.97	7.97	7.97
Interest on loan	60.0938	60.0938	50.0787	40.0628	40.0628





<b>BOND 58 -DOCO 3</b>					
Gross Loan- Opening	3,701.00	3,701.00	3,701.00	3,701.00	3,701.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	3,701.00	3,701.00	3,701.00	3,701.00	3,701.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	3,701.00	3,701.00	3,701.00	3,701.00	3,701.00
Average Net Loan	3,701.00	3,701.00	3,701.00	3,701.00	3,701.00
Rate of Interest on Loan on Annual Basis	7.89	7.89	7.89	7.89	7.89
Interest on loan	292.0089	292.0089	292.0089	292.0089	292.0089

<b>HDFC (RS. 3000 CR.) -DOCO 5</b>					
Gross Loan- Opening	400.02	400.02	400.02	400.02	400.02
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	40.00
Net loan-Opening	400.02	400.02	400.02	400.02	360.02
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	40.00	99.26
Net Loan-Closing	400.02	400.02	400.02	360.02	260.76
Average Net Loan	400.02	400.02	400.02	380.02	310.39
Rate of Interest on Loan on Annual Basis	8.239297	6.719745	5.95	7.298607	8.10
Interest on loan	32.9588	26.8803	23.8012	27.7362	25.1416

<b>BOND 59 -ADDCAP 2017-18 ACCRU</b>					
Gross Loan- Opening	9.53	9.53	9.53	9.53	9.53
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	9.53	9.53	9.53	9.53	9.53



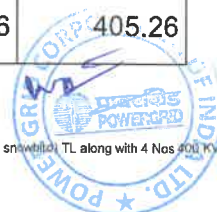
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	9.53	9.53	9.53	9.53	9.53
Average Net Loan	9.53	9.53	9.53	9.53	9.53
Rate of Interest on Loan on Annual Basis	7.30	7.30	7.30	7.30	7.30
Interest on loan	0.6957	0.6957	0.6957	0.6957	0.6957

### BOND 59 -DOCO 6

Gross Loan- Opening	2,068.47	2,068.47	2,068.47	2,068.47	2,068.47
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	2,068.47	2,068.47	2,068.47	2,068.47	2,068.47
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	2,068.47	2,068.47	2,068.47	2,068.47	2,068.47
Average Net Loan	2,068.47	2,068.47	2,068.47	2,068.47	2,068.47
Rate of Interest on Loan on Annual Basis	7.30	7.30	7.30	7.30	7.30
Interest on loan	150.9983	150.9983	150.9983	150.9983	150.9983

### BOND60 (LX) -ADDCAP 2017-18

Gross Loan- Opening	405.26	405.26	405.26	405.26	405.26
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	405.26	405.26	405.26	405.26	405.26
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	405.26	405.26	405.26	405.26	405.26
Average Net Loan	405.26	405.26	405.26	405.26	405.26



Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	29.1787	29.1787	29.1787	29.1787	29.1787

<b>BOND60 (LX) -ADDCAP 2017-18 ACCRU</b>					
Gross Loan- Opening	129.10	129.10	129.10	129.10	129.10
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	129.10	129.10	129.10	129.10	129.10
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	129.10	129.10	129.10	129.10	129.10
Average Net Loan	129.10	129.10	129.10	129.10	129.10
Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	9.2952	9.2952	9.2952	9.2952	9.2952

<b>BOND60 (LX) -ADDCAP 2018-19</b>					
Gross Loan- Opening	0.12	0.12	0.12	0.12	0.12
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.12	0.12	0.12	0.12	0.12
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	0.12	0.12	0.12	0.12	0.12
Average Net Loan	0.12	0.12	0.12	0.12	0.12
Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	0.0086	0.0086	0.0086	0.0086	0.0086

<b>BOND60 (LX) -ADDCAP 2018-19 ACCRU</b>					
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Gross Loan- Opening	70.28	70.28	70.28	70.28	70.28
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	70.28	70.28	70.28	70.28	70.28
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	70.28	70.28	70.28	70.28	70.28
Average Net Loan	70.28	70.28	70.28	70.28	70.28
Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	5.0602	5.0602	5.0602	5.0602	5.0602

#### SBI-04 -ADD CAP 2019-20

Gross Loan- Opening	0.00	7.15	7.15	7.15	7.15
Cumulative repayments of Loans upto previous year	0.00	0.00	0.64	0.68	0.68
Net loan-Opening	0.00	7.15	6.51	6.47	6.47
Add: Drawl(s) during the year	7.15	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.64	0.03	0.00	0.72
Net Loan-Closing	7.15	6.51	6.48	6.47	5.75
Average Net Loan	3.58	6.83	6.50	6.47	6.11
Rate of Interest on Loan on Annual Basis	8.027596	6.902593	6.65	7.225616	8.126549
Interest on loan	0.2874	0.4714	0.4323	0.4675	0.4965

#### SBI-04 -ADDCAP 2018-19

Gross Loan- Opening	150.66	150.66	150.66	150.66	150.66
Cumulative repayments of Loans upto previous year	0.00	0.00	13.56	14.22	14.22
Net loan-Opening	150.66	150.66	137.10	136.44	136.44
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00



Less: Repayment(s) of loan during the year	0.00	13.56	0.66	0.00	15.07
Net Loan-Closing	150.66	137.10	136.44	136.44	121.37
Average Net Loan	150.66	143.88	136.77	136.44	128.91
Rate of Interest on Loan on Annual Basis	8.027596	6.902593	6.65	7.225616	8.126549
Interest on loan	12.0944	9.9315	9.0952	9.8586	10.4759

**ICICI (3270 CR.) (Replaced with Bond LXII) - ADDCAP 2018-19**

Gross Loan- Opening	8.20	8.20	8.20	8.20	8.20
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	8.20	8.20	8.20	8.20	8.20
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	8.20	8.20	8.20	8.20	8.20
Average Net Loan	8.20	8.20	8.20	8.20	8.20
Rate of Interest on Loan on Annual Basis	8.36	8.36	8.36	8.36	8.36
Interest on loan	0.6855	0.6855	0.6855	0.6855	0.6855

**Bond - LXIV -ADD CAP 2019-20**

Gross Loan- Opening	0.00	10.34	10.34	10.34	10.34
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	10.34	10.34	10.34	10.34
Add: Drawl(s) during the year	10.34	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	10.34	10.34	10.34	10.34	10.34
Average Net Loan	5.17	10.34	10.34	10.34	10.34
Rate of Interest on Loan on Annual Basis	7.49	7.49	7.49	7.49	7.49





Interest on loan	0.3872	0.7745	0.7745	0.7745	0.7745
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### HDFC (Rs.5000 Cr.) -ADD CAP 2020-21

Gross Loan- Opening	0.00	0.00	20.65	20.65	20.65
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	10.43	10.43
Net loan-Opening	0.00	0.00	20.65	10.22	10.22
Add: Drawl(s) during the year	0.00	20.65	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	10.43	0.00	0.00
Net Loan-Closing	0.00	20.65	10.22	10.22	10.22
Average Net Loan	0.00	10.33	15.44	10.22	10.22
Rate of Interest on Loan on Annual Basis	5.95	5.95	5.95	7.315205	8.10
Interest on loan	0.00	0.6146	0.9187	0.7476	0.8278

### Summary

Gross Loan- Opening	10,377.84	10,395.33	10,415.98	10,415.98	10,415.98
Cumulative repayments of Loans upto previous year	0.00	210.12	482.77	1,003.69	1,302.14
Net loan-Opening	10,377.84	10,185.21	9,933.21	9,412.29	9,113.84
Add: Drawl(s) during the year	17.49	20.65	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	210.12	272.65	520.90	298.45	373.50
Net Loan-Closing	10,185.21	9,933.21	9,412.31	9,113.84	8,740.34
Average Net Loan	10,281.53	10,059.22	9,672.78	9,263.07	8,927.10
Rate of Interest on Loan on Annual Basis	7.7855	7.5058	7.4342	7.5984	7.7644
Interest on loan	800.4645	755.0215	719.0897	703.8408	693.1319

(Petitioner)



**Calculation of interest on Normative loan**

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOCO Date	Oct 30, 2017

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the Year	366.00	365.00	365.00	365.00	366.00
No. of days for which Tariff claimed	366.00	365.00	365.00	365.00	366.00
Gross normative loan-Opening	10,364.00	10,381.49	10,402.14	10,402.14	10,402.14
Cumulative repayments of Normative loan upto previous year	1,073.72	1,862.35	2,651.99	3,442.17	4,232.35
Net normative loan-Opening	9,290.28	8,519.14	7,750.15	6,959.97	6,169.79
Addition in normative loan towards the ACE	17.49	20.65	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	788.63	789.64	790.18	790.18	790.18
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	8,519.14	7,750.15	6,959.97	6,169.79	5,379.61
Average normative loan	8,904.71	8,134.65	7,355.06	6,564.88	5,774.70
Weighted Average Rate of interest on actual loan	7.7855	7.5058	7.4342	7.5984	7.7644
Interest on normative loan	693.28	610.57	546.79	498.83	448.37
Pro rata interest on normative loan	693.28	610.57	546.79	498.83	448.37

(Petitioner)





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

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOC Date	Oct 30, 2017

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2024
<b>2019-20</b>						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	56.96	19.80	76.76	66.86	3.34	2.23
Transmission Line	12,440.89	16.90	12,457.79	12,449.34	5.28	657.33
Sub Station	2,038.16	-11.72	2,026.44	2,032.30	5.28	107.31
Comm. Sys. excluding Fiber Optic	215.64	0.00	215.64	215.64	6.33	13.65
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	54.06	0.00	54.06	54.06	15.00	8.11
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>14,805.71</b>	<b>24.98</b>	<b>14,830.69</b>	<b>14,818.20</b>	<b>0.00</b>	<b>788.63</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.322036</b>	

<b>2020-21</b>						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00



Civil & Building	76.76	23.65	100.41	88.59	3.34	2.96
Transmission Line	12,457.79	0.00	12,457.79	12,457.79	5.28	657.77
Sub Station	2,026.44	5.85	2,032.29	2,029.37	5.28	107.15
Comm. Sys. excluding Fiber Optic	215.64	0.00	215.64	215.64	6.33	13.65
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	54.06	0.00	54.06	54.06	15.00	8.11
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>14,830.69</b>	<b>29.50</b>	<b>14,860.19</b>	<b>14,845.45</b>	<b>0.00</b>	<b>789.64</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.319071</b>	

### 2021-22

Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	100.41	0.00	100.41	100.41	3.34	3.35
Transmission Line	12,457.79	0.00	12,457.79	12,457.79	5.28	657.77
Sub Station	2,032.29	0.00	2,032.29	2,032.29	5.28	107.30
Comm. Sys. excluding Fiber Optic	215.64	0.00	215.64	215.64	6.33	13.65
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	54.06	0.00	54.06	54.06	15.00	8.11
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>14,860.19</b>	<b>0.00</b>	<b>14,860.19</b>	<b>14,860.19</b>	<b>0.00</b>	<b>790.18</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.317429</b>	



<b>2022-23</b>						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	100.41	0.00	100.41	100.41	3.34	3.35
Transmission Line	12,457.79	0.00	12,457.79	12,457.79	5.28	657.77
Sub Station	2,032.29	0.00	2,032.29	2,032.29	5.28	107.30
Comm. Sys. excluding Fiber Optic	215.64	0.00	215.64	215.64	6.33	13.65
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	54.06	0.00	54.06	54.06	15.00	8.11
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>14,860.19</b>	<b>0.00</b>	<b>14,860.19</b>	<b>14,860.19</b>	<b>0.00</b>	<b>790.18</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.317429</b>	

<b>2023-24</b>						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	100.41	0.00	100.41	100.41	3.34	3.35
Transmission Line	12,457.79	0.00	12,457.79	12,457.79	5.28	657.77
Sub Station	2,032.29	0.00	2,032.29	2,032.29	5.28	107.30
Comm. Sys. excluding Fiber Optic	215.64	0.00	215.64	215.64	6.33	13.65
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	54.06	0.00	54.06	54.06	15.00	8.11
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>14,860.19</b>	<b>0.00</b>	<b>14,860.19</b>	<b>14,860.19</b>	<b>0.00</b>	<b>790.18</b>



<b>Weighted Average Rate of Depreciation(%)</b>					5.317429	
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(Petitioner)



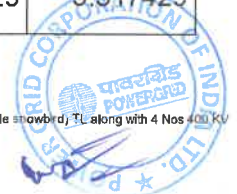
**Statement of Depreciation**

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)			
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s			
Region	Western Region	DOCOC Date	Oct 30, 2017	

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	366.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
<b>Life at the beginning of the year</b>					
1.1 Weighted Average useful life of the Asset/ Project	33.00	33.00	33.00	33.00	33.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	1.00	2.00	3.00	4.00	5.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	32.00	31.00	30.00	29.00	28.00
<b>Capital Base</b>					
1.4 Opening capital cost	14,805.71	14,830.69	14,860.19	14,860.19	14,860.19
1.5 Additional Capital Expenditure dr. the year	24.98	29.50	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	14,830.69	14,860.19	14,860.19	14,860.19	14,860.19
1.8 Average capital cost	14,818.20	14,845.45	14,860.19	14,860.19	14,860.19
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	54.06	54.06	54.06	54.06	54.06
1.11 Asset having 10% salvage value included in 1.8	14,764.14	14,791.39	14,806.13	14,806.13	14,806.13
1.12 Depreciable Value(1.10+90% of 1.11)	13,341.79	13,366.31	13,379.58	13,379.58	13,379.58
<b>Depreciation for the period and Cum. Depreciation</b>					
1.13 Weighted Average Rate of depreciation	5.322036	5.319071	5.317429	5.317429	5.317429



1.14 Depreciation(for the period)	788.63	789.64	790.18	790.18	790.18
1.15 Depreciation(Annualised)	788.63	789.64	790.18	790.18	790.18
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	1,073.73	1,862.36	2,652.00	3,442.18	4,232.36
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	1,862.36	2,652.00	3,442.18	4,232.36	5,022.54

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(Petitioner)



**Calculation of interest on working Capital**

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOCO Date	Oct 30, 2017

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	366.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
O&M Expenses-one month	12.62	13.07	13.53	14.00	14.49
Maintenance spares 15% of O&M Expenses	22.72	23.52	24.35	25.20	26.09
Receivables equivalent to 45 days of AFC	308.58	299.75	292.35	287.09	281.36
Total Working capital	343.92	336.34	330.23	326.29	321.94
Bank Rate as on 01.04.2019 or as on 01st April of the COD year, whichever is later.	12.05	11.25	10.50	10.50	12.00
Interest on working capital	41.44	37.84	34.67	34.26	38.63
Pro rata interest on working capital	41.44	37.84	34.67	34.26	38.63

  
(Petitioner)



**Summary of Tariff**

Form No. - 1

Name of the Transmission Licensee: Power Grid Corporation of India Limited	
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s
Region	Western Region
DOC Date	Oct 30, 2017

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Year Days	365.00	365.00	365.00	366.00	365.00
Tariff Days	365.00	365.00	365.00	366.00	365.00
Depreciation-Form No. 10A	808.88	802.23	800.77	778.42	768.42
Interest on Loan-Form No. 9E	385.98	322.83	258.32	196.91	145.82
Return on Equity-Form No. 8	837.31	837.31	837.31	837.31	837.31
Int. on Working capital-Form No.11	36.31	35.59	34.94	33.96	33.50
Op. and maintenance-Form No.2	140.47	147.85	155.59	163.77	172.34
Total AFC	2,208.95	2,145.81	2,086.93	2,010.37	1,957.39

  
 (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	Transmission system Strengthening associated with Mundra UMPP ( Part-A)	
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s	
Region	Western Region	DOCO Date Oct 30, 2017

**1. Transmission Lines**

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/HVDC	S/C or D/C	No of Sub-Conductors	Voltage Level KV	Line Bays	Line Reactor (Including Switchable Reactor)	Line Length Km	Date of Commercial operation	Covered in the present petition	
									Yes/No	If No, Petition No.
LILO OF MUNDRA UMPP-LIMBDI LINE (D/C) PORTION	AC	DC	3	400 KV	0.000	0.000	18.240	Oct 30, 2017		Y
LILO OF MUNDRA-LIMBDI LINE (M/C) PORTION	AC	MC	3	400 KV	4.000	0.000	4.410	Oct 30, 2017		Y

**Summary:**

O&M Expenses For the Transmission Lines Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
<b>DOUBLE CIRCUIT (TRIPLE 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 )	18.24	18.24	18.24	18.24	18.24



O&M Claimed	15.70	16.53	17.38	18.29	19.26
<b>MULTICIRCUIT WITH THREE 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 )	4.41	4.41	4.41	4.41	4.41
O&M Claimed	6.65	7.00	7.37	7.76	8.16

*ms*



## 2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transformers/ Reactor/ SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition Yes/ No
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV		
Bhachaur:400 KV MUNDRA BAY I AND II AT BHACHAU	Conventional	400 KV		2.000								Oct 30, 2017	Y
Bhachaur:400 KV LIMBDI BAYS I AND II AT BHACHAU	Conventional	400 KV		2.000								Oct 30, 2017	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	4.00	4.00	4.00	4.00	4.00
O&M Claimed	118.12	124.32	130.84	137.72	144.92



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	22.35	23.53	24.75	26.05	27.42
Substation	118.12	124.32	130.84	137.72	144.92
Communication System	0.00	0.00	0.00	0.00	0.00
<b>Total Normative O&amp;M</b>	<b>140.47</b>	<b>147.85</b>	<b>155.59</b>	<b>163.77</b>	<b>172.34</b>
<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
<b>Total O&amp;M</b>	<b>140.47</b>	<b>147.85</b>	<b>155.59</b>	<b>163.77</b>	<b>172.34</b>

*[Signature]*

(Petitioner)



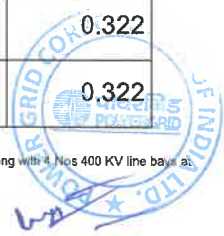
**Normative parameters considered for tariff computations**

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOC Date	Oct 30, 2017

(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)





**Statement of Capital cost**

Form No. - 4A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOCO Date	Oct 30, 2017

(Amount in Rs. Lakh)

**A) Capital Cost**

Particular	Accrual Basis	Un-discharged Liabilities	Cash Basis
<b>As on relevant date :2024-25</b>			
a) Opening Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	184.24	0.00	184.24
<b>As on relevant date :2025-26</b>			
a) Addition in Gross Block Amount during the period	0.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00
a) Closing Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	184.24	0.00	184.24
<b>As on relevant date :2025-26</b>			
a) Opening Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	458.66	0.00	458.66



c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	184.24	0.00	184.24
a) Addition in Gross Block Amount during the period			
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	184.24	0.00	184.24

**As on relevant date :2026-27**

a) Opening Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	184.24	0.00	184.24

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

a) Closing Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	184.24	0.00	184.24

**As on relevant date :2027-28**

a) Opening Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	184.24	0.00	184.24

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

a) Closing Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	184.24	0.00	184.24

**As on relevant date :2028-29**

a) Opening Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	184.24	0.00	184.24

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

a) Closing Gross Block Amount as per books	14,860.19	0.00	14,860.19
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	458.66	0.00	458.66
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	184.24	0.00	184.24

**B) Flow of liability for the Asset**

(Amount in Rs. Lakh)

Particular					
Opening balance of liability	0.00	0.00	0.00	0.00	0.00
Add: Liability from ACE	0.00	0.00	0.00	0.00	0.00

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

*[Signature]*  
(Petitioner)



**Financial Package upto COD**

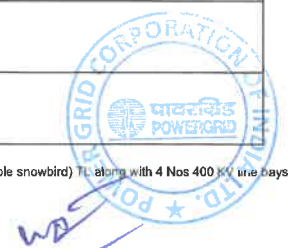
Form No. - 6

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOC Date	Oct 30, 2017

(Amount in Rs. Lakh)

Particulars	Financial Package as Approved		Financial Package as on COD 01/04/2024		As Admitted on COD 01/04/2024	
	Currency	Amount	Currency	Amount	Currency	Amount
Loans		0.00		0.00		0.00
Loan-Domestic		0.00		0.00		0.00
Loan-Foreign		0.00		0.00		0.00
Total Loans	INR	10,398.91	INR	10,402.14		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	4,456.66	INR	4,458.05		0.00
Total Equity	INR	4,456.66	INR	4,458.05		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	14,855.57	INR	14,860.19		0.00

Particulars	Debt	Equity	Total
Addcap for 2024 - 2025			0.00
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		0.00	
Debt		0.00	
Total		0.00	
<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>		14,860.19	

WA  
(Petitioner)





**Statement of Additional Capitalisation after COD**

Form No. - 7

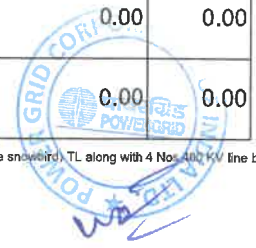
Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOC Date	Oct 30, 2017

(Amount in Rs. Lakh)

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



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



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

*WA*

(Petitioner)



**Financing of Additional Capitalisation**

Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)	
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s	
Region	Western Region	DOCO Date   Oct 30, 2017

(Amount in Rs. Lakh)

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



(Petitioner)

### Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILLO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOC Date	Oct 30, 2017

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the year	365.00	365.00	365.00	366.00	365.00
No. of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
Opening Normative Equity	4,458.05	4,458.05	4,458.05	4,458.05	4,458.05
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)	4,458.05	4,458.05	4,458.05	4,458.05	4,458.05
Add: Increase in Equity due to addition during the year / period	0.00	0.00	0.00	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	0.00	0.00	0.00	0.00
Closing Normative Equity	4,458.05	4,458.05	4,458.05	4,458.05	4,458.05
Average Normative Equity	4,458.05	4,458.05	4,458.05	4,458.05	4,458.05
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	837.31	837.31	837.31	837.31	837.31
Pro rata return on Equity	837.31	837.31	837.31	837.31	837.31

  
 (Petitioner)

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

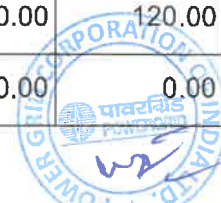
Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)				
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s				
Region	Western Region	DOC Date	Oct 30, 2017		

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
<b>SBI (2014-15) -ADDCAP 2017-18</b>					
Gross Loan- Opening	901.20	901.20	901.20	901.20	901.20
Cumulative repayments of Loans upto previous year	450.60	540.72	630.84	720.96	811.08
Net loan-Opening	450.60	360.48	270.36	180.24	90.12
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	90.12	90.12	90.12	90.12	90.12
Net Loan-Closing	360.48	270.36	180.24	90.12	0.00
Average Net Loan	405.54	315.42	225.30	135.18	45.06
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	33.2543	25.8644	18.4746	11.0848	3.6949

<b>SBI (2014-15) -DOCO 4</b>					
Gross Loan- Opening	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00
Cumulative repayments of Loans upto previous year	600.00	720.00	840.00	960.00	1,080.00
Net loan-Opening	600.00	480.00	360.00	240.00	120.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	120.00	120.00	120.00	120.00	120.00
Net Loan-Closing	480.00	360.00	240.00	120.00	0.00

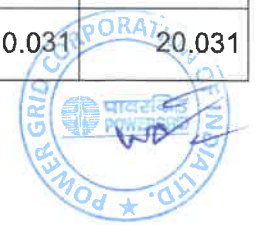




Average Net Loan	540.00	420.00	300.00	180.00	60.00
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	44.28	34.44	24.60	14.76	4.92

<b>BOND LIII -DOCO 1</b>					
Gross Loan- Opening	580.00	580.00	580.00	580.00	580.00
Cumulative repayments of Loans upto previous year	193.33	241.67	290.00	338.33	386.67
Net loan-Opening	386.67	338.33	290.00	241.67	193.33
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	48.33	48.33	48.33	48.33	48.33
Net Loan-Closing	338.34	290.00	241.67	193.34	145.00
Average Net Loan	362.51	314.17	265.84	217.51	169.17
Rate of Interest on Loan on Annual Basis	8.13	8.13	8.13	8.13	8.13
Interest on loan	29.4721	25.542	21.6128	17.6836	13.7535

<b>BOND LIV -DOCO 2</b>					
Gross Loan- Opening	754.00	754.00	754.00	754.00	754.00
Cumulative repayments of Loans upto previous year	251.33	251.33	251.33	502.67	502.67
Net loan-Opening	502.67	502.67	502.67	251.33	251.33
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	251.33	0.00	0.00
Net Loan-Closing	502.67	502.67	251.34	251.33	251.33
Average Net Loan	502.67	502.67	377.01	251.33	251.33
Rate of Interest on Loan on Annual Basis	7.97	7.97	7.97	7.97	7.97
Interest on loan	40.0628	40.0628	30.0477	20.031	20.031



<b>BOND 58 -DOCO 3</b>					
Gross Loan- Opening	3,701.00	3,701.00	3,701.00	3,701.00	3,701.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	3,701.00	3,701.00
Net loan-Opening	3,701.00	3,701.00	3,701.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	3,701.00	0.00	0.00
Net Loan-Closing	3,701.00	3,701.00	0.00	0.00	0.00
Average Net Loan	3,701.00	3,701.00	1,850.50	0.00	0.00
Rate of Interest on Loan on Annual Basis	7.89	7.89	7.89	7.89	7.89
Interest on loan	292.0089	292.0089	146.0045	0.00	0.00

<b>HDFC (RS. 3000 CR.) -DOCO 5</b>					
Gross Loan- Opening	400.02	400.02	400.02	400.02	400.02
Cumulative repayments of Loans upto previous year	139.27	171.86	204.45	237.05	269.64
Net loan-Opening	260.75	228.16	195.57	162.97	130.38
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	32.59	32.59	32.59	32.59	32.59
Net Loan-Closing	228.16	195.57	162.98	130.38	97.79
Average Net Loan	244.46	211.87	179.28	146.68	114.09
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	19.8013	17.1615	14.5217	11.8811	9.2413

<b>BOND 59 -ADDCAP 2017-18 ACCRU</b>					
Gross Loan- Opening	9.53	9.53	9.53	9.53	9.53
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	9.53
Net loan-Opening	9.53	9.53	9.53	9.53	0.00



Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	9.53	0.00
Net Loan-Closing	9.53	9.53	9.53	0.00	0.00
Average Net Loan	9.53	9.53	9.53	4.77	0.00
Rate of Interest on Loan on Annual Basis	7.30	7.30	7.30	7.30	7.30
Interest on loan	0.6957	0.6957	0.6957	0.3482	0.00

### BOND 59 -DOCO 6

Gross Loan- Opening	2,068.47	2,068.47	2,068.47	2,068.47	2,068.47
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	2,068.47
Net loan-Opening	2,068.47	2,068.47	2,068.47	2,068.47	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	2,068.47	0.00
Net Loan-Closing	2,068.47	2,068.47	2,068.47	0.00	0.00
Average Net Loan	2,068.47	2,068.47	2,068.47	1,034.24	0.00
Rate of Interest on Loan on Annual Basis	7.30	7.30	7.30	7.30	7.30
Interest on loan	150.9983	150.9983	150.9983	75.4995	0.00

### BOND60 (LX) -ADDCAP 2017-18

Gross Loan- Opening	405.26	405.26	405.26	405.26	405.26
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	405.26
Net loan-Opening	405.26	405.26	405.26	405.26	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	405.26	0.00
Net Loan-Closing	405.26	405.26	405.26	0.00	0.00
Average Net Loan	405.26	405.26	405.26	202.63	0.00



Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	29.1787	29.1787	29.1787	14.5894	0.00

**BOND60 (LX) -ADDCAP 2017-18 ACCRU**

Gross Loan- Opening	129.10	129.10	129.10	129.10	129.10
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	129.10
Net loan-Opening	129.10	129.10	129.10	129.10	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	129.10	0.00
Net Loan-Closing	129.10	129.10	129.10	0.00	0.00
Average Net Loan	129.10	129.10	129.10	64.55	0.00
Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	9.2952	9.2952	9.2952	4.6476	0.00

**BOND60 (LX) -ADDCAP 2018-19**

Gross Loan- Opening	0.12	0.12	0.12	0.12	0.12
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.12
Net loan-Opening	0.12	0.12	0.12	0.12	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.12	0.00
Net Loan-Closing	0.12	0.12	0.12	0.00	0.00
Average Net Loan	0.12	0.12	0.12	0.06	0.00
Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	0.0086	0.0086	0.0086	0.0043	0.00

**BOND60 (LX) -ADDCAP 2018-19 ACCRU**


Gross Loan- Opening	70.28	70.28	70.28	70.28	70.28
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	70.28
Net loan-Opening	70.28	70.28	70.28	70.28	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	70.28	0.00
Net Loan-Closing	70.28	70.28	70.28	0.00	0.00
Average Net Loan	70.28	70.28	70.28	35.14	0.00
Rate of Interest on Loan on Annual Basis	7.20	7.20	7.20	7.20	7.20
Interest on loan	5.0602	5.0602	5.0602	2.5301	0.00

#### SBI-04 -ADD CAP 2019-20

Gross Loan- Opening	7.15	7.15	7.15	7.15	7.15
Cumulative repayments of Loans upto previous year	1.39	2.11	2.82	3.54	4.25
Net loan-Opening	5.76	5.04	4.33	3.61	2.90
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.72	0.72	0.72	0.72	0.72
Net Loan-Closing	5.04	4.32	3.61	2.89	2.18
Average Net Loan	5.40	4.68	3.97	3.25	2.54
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.4428	0.3838	0.3255	0.2665	0.2083

#### SBI-04 -ADDCAP 2018-19

Gross Loan- Opening	150.66	150.66	150.66	150.66	150.66
Cumulative repayments of Loans upto previous year	29.29	44.35	59.42	74.49	89.55
Net loan-Opening	121.37	106.31	91.24	76.17	61.11
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00



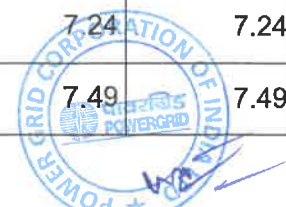
Less: Repayment(s) of loan during the year	15.07	15.07	15.07	15.07	15.07
Net Loan-Closing	106.30	91.24	76.17	61.10	46.04
Average Net Loan	113.84	98.78	83.71	68.64	53.58
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	9.3349	8.10	6.8642	5.6285	4.3936

**ICICI (3270 CR.) (Replaced with Bond LXII) - ADDCAP 2018-19**

Gross Loan- Opening	8.20	8.20	8.20	8.20	8.20
Cumulative repayments of Loans upto previous year	0.00	1.64	3.28	4.92	6.56
Net loan-Opening	8.20	6.56	4.92	3.28	1.64
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	1.64	1.64	1.64	1.64	1.64
Net Loan-Closing	6.56	4.92	3.28	1.64	0.00
Average Net Loan	7.38	5.74	4.10	2.46	0.82
Rate of Interest on Loan on Annual Basis	8.36	8.36	8.36	8.36	8.36
Interest on loan	0.617	0.4799	0.3428	0.2057	0.0686

**Bond - LXIV -ADD CAP 2019-20**

Gross Loan- Opening	10.34	10.34	10.34	10.34	10.34
Cumulative repayments of Loans upto previous year	0.00	3.10	3.10	3.10	3.10
Net loan-Opening	10.34	7.24	7.24	7.24	7.24
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	3.10	0.00	0.00	0.00	0.00
Net Loan-Closing	7.24	7.24	7.24	7.24	7.24
Average Net Loan	8.79	7.24	7.24	7.24	7.24
Rate of Interest on Loan on Annual Basis	7.49	7.49	7.49	7.49	7.49





Interest on loan	0.6584	0.5423	0.5423	0.5423	0.5423
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### HDFC (Rs.5000 Cr.) -ADD CAP 2020-21

Gross Loan- Opening	20.65	20.65	20.65	20.65	20.65
Cumulative repayments of Loans upto previous year	10.43	10.43	10.43	11.45	12.48
Net loan-Opening	10.22	10.22	10.22	9.20	8.17
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	1.02	1.02	1.02
Net Loan-Closing	10.22	10.22	9.20	8.18	7.15
Average Net Loan	10.22	10.22	9.71	8.69	7.66
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	0.8278	0.8278	0.7865	0.7039	0.6205

### Summary

Gross Loan- Opening	10,415.98	10,415.98	10,415.98	10,415.98	10,415.98
Cumulative repayments of Loans upto previous year	1,675.64	1,987.21	2,295.67	6,557.51	9,549.76
Net loan-Opening	8,740.34	8,428.77	8,120.31	3,858.47	866.22
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	311.57	308.47	4,261.82	2,992.25	309.49
Net Loan-Closing	8,428.77	8,120.30	3,858.49	866.22	556.73
Average Net Loan	8,584.57	8,274.55	5,989.42	2,362.37	711.49
Rate of Interest on Loan on Annual Basis	7.7581	7.7424	7.6695	7.6367	8.078
Interest on loan	665.997	640.6501	459.3593	180.4065	57.474



**Calculation of interest on Normative loan**

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOCO Date	Oct 30, 2017

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the Year	365.00	365.00	365.00	366.00	365.00
No. of days for which Tariff claimed	365.00	365.00	365.00	366.00	365.00
Gross normative loan-Opening	10,402.14	10,402.14	10,402.14	10,402.14	10,402.14
Cumulative repayments of Normative loan upto previous year	5,022.53	5,831.41	6,633.64	7,434.41	8,212.83
Net normative loan-Opening	5,379.61	4,570.73	3,768.50	2,967.73	2,189.31
Addition in normative loan towards the ACE	0.00	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	808.88	802.23	800.77	778.42	768.42
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	4,570.73	3,768.50	2,967.73	2,189.31	1,420.89
Average normative loan	4,975.17	4,169.62	3,368.12	2,578.52	1,805.10
Weighted Average Rate of interest on actual loan	7.7581	7.7424	7.6695	7.6367	8.078
Interest on normative loan	385.98	322.83	258.32	196.91	145.82
Pro rata interest on normative loan	385.98	322.83	258.32	196.91	145.82

  
 (Petitioner)  


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

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOC Date	Oct 30, 2017

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2029
<b>2024-25</b>						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	100.41	0.00	100.41	100.41	3.34	3.35
Transmission Line	12,457.79	0.00	12,457.79	12,457.79	5.28	657.77
Sub Station	2,032.29	0.00	2,032.29	2,032.29	5.28	107.30
Comm. Sys. excluding Fiber Optic	215.64	0.00	215.64	215.64	15.00	32.35
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	54.06	0.00	54.06	54.06	15.00	8.11
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
<b>TOTAL</b>	<b>14,860.19</b>	<b>0.00</b>	<b>14,860.19</b>	<b>14,860.19</b>	<b>0.00</b>	<b>808.88</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.443268</b>	

<b>2025-26</b>						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00



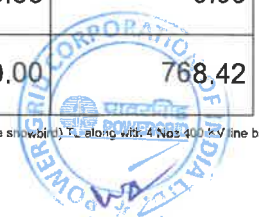
Civil & Building	100.41	0.00	100.41	100.41	3.34	3.35
Transmission Line	12,457.79	0.00	12,457.79	12,457.79	5.28	657.77
Sub Station	2,032.29	0.00	2,032.29	2,032.29	5.28	107.30
Comm. Sys. excluding Fiber Optic	215.64	0.00	215.64	215.64	15.00	32.35
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	54.06	0.00	54.06	54.06	15.00	1.46
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>14,860.19</b>	<b>0.00</b>	<b>14,860.19</b>	<b>14,860.19</b>	<b>0.00</b>	<b>802.23</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.398518</b>	

<b>2026-27</b>						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	100.41	0.00	100.41	100.41	3.34	3.35
Transmission Line	12,457.79	0.00	12,457.79	12,457.79	5.28	657.77
Sub Station	2,032.29	0.00	2,032.29	2,032.29	5.28	107.30
Comm. Sys. excluding Fiber Optic	215.64	0.00	215.64	215.64	15.00	32.35
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	54.06	0.00	54.06	54.06	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>14,860.19</b>	<b>0.00</b>	<b>14,860.19</b>	<b>14,860.19</b>	<b>0.00</b>	<b>800.77</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.388693</b>	



2027-28						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	100.41	0.00	100.41	100.41	3.34	3.35
Transmission Line	12,457.79	0.00	12,457.79	12,457.79	5.28	657.77
Sub Station	2,032.29	0.00	2,032.29	2,032.29	5.28	107.30
Comm. Sys. excluding Fiber Optic	215.64	0.00	215.64	215.64	15.00	10.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	54.06	0.00	54.06	54.06	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>14,860.19</b>	<b>0.00</b>	<b>14,860.19</b>	<b>14,860.19</b>	<b>0.00</b>	<b>778.42</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.238291</b>	

2028-29						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	100.41	0.00	100.41	100.41	3.34	3.35
Transmission Line	12,457.79	0.00	12,457.79	12,457.79	5.28	657.77
Sub Station	2,032.29	0.00	2,032.29	2,032.29	5.28	107.30
Comm. Sys. excluding Fiber Optic	215.64	0.00	215.64	215.64	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	54.06	0.00	54.06	54.06	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>14,860.19</b>	<b>0.00</b>	<b>14,860.19</b>	<b>14,860.19</b>	<b>0.00</b>	<b>768.42</b>



<b>Weighted Average Rate of Depreciation(%)</b>					5.170997	
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(Petitioner)





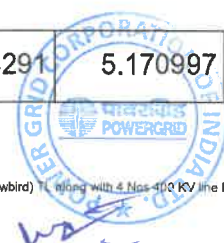
## Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)				
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s				
Region	Western Region	DOC Date	Oct 30, 2017		

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
<b>Life at the beginning of the year</b>					
1.1 Weighted Average useful life of the Asset/ Project	33.00	33.00	33.00	33.00	33.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	6.00	7.00	8.00	9.00	10.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	27.00	26.00	25.00	24.00	23.00
<b>Capital Base</b>					
1.4 Opening capital cost	14,860.19	14,860.19	14,860.19	14,860.19	14,860.19
1.5 Additional Capital Expenditure dr. the year	0.00	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	14,860.19	14,860.19	14,860.19	14,860.19	14,860.19
1.8 Average capital cost	14,860.19	14,860.19	14,860.19	14,860.19	14,860.19
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	54.06	54.06	54.06	54.06	54.06
1.11 Asset having 10% salvage value included in 1.8	14,806.13	14,806.13	14,806.13	14,806.13	14,806.13
1.12 Depreciable Value(1.10+90% of 1.11)	13,379.58	13,379.58	13,379.58	13,379.58	13,379.58
<b>Depreciation for the period and Cum. Depreciation</b>					
1.13 Weighted Average Rate of depreciation	5.443268	5.398518	5.388693	5.238291	5.170997



1.14 Depreciation(for the period)	808.88	802.23	800.77	778.42	768.42
1.15 Depreciation(Annualised)	808.88	802.23	800.77	778.42	768.42
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	5,022.54	5,831.42	6,633.65	7,434.42	8,212.84
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	5,831.42	6,633.65	7,434.42	8,212.84	8,981.26

  
 (Petitioner)



**Calculation of interest on working Capital**

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Transmission system Strengthening associated with Mundra UMPP ( Part-A)		
Element Description	LILO of both Ckts of Mundra UMPP-Limbdi 400 KV D/C (triple snowbird) TL along with 4 Nos 400 KV line bays at Bachau S/s		
Region	Western Region	DOCO Date	Oct 30, 2017

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
O&M Expenses-one month	11.71	12.32	12.97	13.65	14.36
Maintenance spares 15% of O&M Expenses	21.07	22.18	23.34	24.57	25.85
Receivables equivalent to 45 days of AFC	272.34	264.55	257.29	247.18	241.32
Total Working capital	305.12	299.05	293.60	285.40	281.53
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	36.31	35.59	34.94	33.96	33.50
Pro rata interest on working capital	36.31	35.59	34.94	33.96	33.50



(Petitioner)



Summary of issue involved in the petition		PART-III FORM- 15		
1. Name of the Petitioner	Power Grid Corporation of India Limited			
2. Petition Category	Transmission			
3. Tariff Period	2019-24			
4. Name of the Project	Transmission System Strengthening associated with Mundra UMPP (Part-A)" in Western Region			
5. Investment Approval date	12.01.2016			
6. SCOD of the Project	12.07.2018			
7. Actual COD/ECOD of the project	30.10.2017			
8. Whether entire scope is covered in the present petition.	Yes			
9. No. of Assets covered in instant petition	1 no			
10. No. of Assets having time over run	NA			
11. Estimated Project Cost as per IA	Rs. 24419 Lakh			
12. Is there any REC? if so, provide the date	NA			
13. Revised Estimated Project Cost (if any)	NA			
14. Completion cost for all the assets covered in the instant petition.	Rs. 14860.19 Lakh			
15. No. of Assets covered in instant petition and having cost overrun.	N.A.			
16	<b>Prayer in brief</b>			
17	<b>Key details and any Specific issue involved</b>			
18	<b>Respondents</b>			
	<b>Name of Respondents</b>			
	1	MADHYA PRADESH POWER MANAGEMENT COMPANY LTD	5	DNHDD POWER DISTRIBUTION CORPORATION LIMITED
	2	MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.	6	CHHATTISGARH STATE POWER DISTRIBUTION CO. LTD
	3	GUJARAT URJA VIKAS NIGAM LTD.		
	4	ELECTRICITY DEPARTMENT, GOA		

(Petitioner)



**PART-III**

**Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL the assets covered in the present petition.**

<b>Name of the Petitioner</b>	Powergrid Corporation of India Limited
<b>Tariff Period</b>	2019-24
<b>Name of the Transmission Project</b>	Transmission System Strengthening associated with Mundra UMPP (Part-A)* in Western Region
<b>COD/E-COD of the Project (if entire scope of project is completed)</b>	30.10.2017

Rupees in lakhs

**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/E-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	Cost as on COD/ 31.03.2019	2019-20	2020-21	2021-22	2022-23	2023-24	Capital Cost as on cut of date					
1	Asset-1	30.10.2017	31.03.2020	24419.00	-	14805.71	24.98	29.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14860.19	12
				24419.00	0.00	14805.71	24.98	29.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

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

S. No.	Asset No.	Asset Name and its location	2019-20	2020-21	2021-22	2022-23	2023-24
1	1	LILO of both circuits of Mundra UMPP- Limbdi 400 kV D/C line (triple snowbird) at Bachau Sub-station along with extension of 400 kV Bachau Sub-station.	2509.78	2431.33	2371.26	2328.59	2288.39
<b>Total AFC for all the Assets</b>			<b>2509.78</b>	<b>2431.33</b>	<b>2371.26</b>	<b>2328.59</b>	<b>2288.39</b>

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

(Petitioner)



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

**PART-III**  
**Check List**

Form No.	Title of Tariff Filing Forms (Transmission& Communication System)	Tick
FORM- 1	Summary of Tariff	✓
FORM- 1A	Summary of Asset level cost	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	✓
FORM- 4	Abstract of existing transmission assets/elements under project. Determination of Effective COD and Weighted Average Life for single AFC for the project as whole.	N.A.
FORM- 4A	Statement of Capital cost	✓
FORM- 4B	Statement of Capital Works in Progress	N.A.
FORM- 4C	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New Project/Element	N.A.
FORM-5	Element wise Break-up of Project/ Asset/Element Cost for Transmission System or Communication System	N.A.
FORM-5A	Break-up of Construction/Supply/Service packages	N.A.
FORM-5B	Details of all the assets covered in the project	N.A.
FORM- 6	Actual Cash Expenditure and Financial Package up to COD	✓
FORM- 7	Statement of Additional Capitalisation after COD	✓
FORM- 7A	Financing of Additional Capitalisation	✓
FORM- 7B	Statement of Additional Capitalisation during five year before the end of the useful life of the project.	N.A.
FORM- 8	Calculation of Return on Equity	✓
FORM-8A	Details of Foreign Equity	N.A.
FORM-9	Details of Allocation of corporate loans to various transmission elements	N.A.
FORM-9A	Details of Project Specific Loans	N.A.
FORM-9B	Details of Foreign loans	N.A.
FORM-9C	Calculation of Weighted Average Rate of Interest on Actual Loans	✓
FORM-9D	Loans in Foreign Currency	N.A.
FORM-9E	Calculation of Interest on Normative Loan	✓
FORM- 10	Calculation of Depreciation Rate on original project cost	✓
FORM- 10A	Statement of Depreciation	✓
FORM- 10B	Statement of De-capitalisation	N.A.
FORM- 11	Calculation of Interest on Working Capital	✓
FORM- 12	Details of time over run	N.A.
FORM- 12A	Incidental Expenditure during Construction	N.A.
FORM- 12B	Calculation of IDC & Financing Charges	N.A.
FORM- 13	Details of Initial spares	N.A.
FORM- 14	Non-Tariff Income	N.A.
FORM- 15	Summary of issue involved in the petition	N.A.
FORM A	Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL	N.A.
<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 BFTA/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.		

