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

Petition	No	/TT/
FGUUDII	IAO.	/ 1 1 /

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 1x500 MVA, 400/220 kV ICT augmentation along with associated bays at Shujalpur (PG) substation under "ICT augmentation at 2x315 MVA, 400/220 kV Shujalpur (PG) substation" 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: 07.10.2024

General Manager (Commercial)

(Zafrul Hasan)

# 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 1x500 MVA, 400/220 kV ICT augmentation along with associated bays at Shujalpur (PG) substation under "ICT augmentation at 2x315 MVA, 400/220 kV Shujalpur (PG) substation" 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.

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## and Others

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**FILED BY** 

POWER GRID CORPORATION OF INDIA LTD.

**GURGAON** 

DATED: 07.10.2024

REPRESENTED BY

Zafrul Hasan

General Manager (Commercial)

# BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION,

### **NEW DELHI**

<b>Petition</b>	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 1x500 MVA, 400/220 kV ICT augmentation along with associated bays at Shujalpur (PG) substation under "ICT augmentation at 2x315 MVA, 400/220 kV Shujalpur (PG) substation" 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.

Registered office: B-9, Qutab Institutional Area,

--- PETITIONER

Katwaria Sarai, New Delhi. 110 016.

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

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

# Madhya Pradesh Power Management Company Ltd. ---- RESPONDENTS

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

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: 07.10.2024** 

POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

Zafrul Hasan

General Manager (Commercial)

# BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION,

#### **NEW DELHI**

|--|

IN THE MATTER OF: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for 1x500 MVA, 400/220 kV ICT augmentation along with associated bays at Shujalpur (PG) substation under "ICT augmentation at 2x315 MVA, 400/220 kV Shujalpur (PG) substation" 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

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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**

MADHYA PRADESH POWER MANAGEMENT COMPANY LTD.

SHAKTI BHAWAN, RAMPUR, JABALPUR - 482 008

EMAIL-ANURAG.NAIK@MPPMCL.COM&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

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

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

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

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

CONTACT NO- 982618253

REPRESENTED BY ITS CHAIRMAN

**FILED BY** 

POWER GRID CORPORATION OF INDIA LTD

REPRESENTED BY:

**PLACE:** Gurugram

DATE: 07.10.2024

Zafrul Hasan

General Manager (Commercial)

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

Petition	No	/TT/
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IN THE MATTER OF: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for 1x500 MVA, 400/220 kV ICT augmentation along with associated bays at Shujalpur (PG) substation under "ICT augmentation at 2x315 MVA, 400/220 kV Shujalpur (PG) substation" 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.

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Registered office: B-9, Qutab Institutional Area,

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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

# **MEMO OF APPEARANCE**

#### POWER GRID CORPORATION OF INDIA LTD.

-- PETITIONER

- 1. Shri Dilip Nagesh Rozekar, Executive Director (Commercial & RC), POWERGRID
- 2. Shri Mohd. Mohsin, Chief General Manager, POWERGRID
- 3. V.C. Sekhar, Senior General Manager, POWERGRID
- 4. Shri Zafrul Hasan, General Manager, POWERGRID
- 5. Shri Vishal Sagar, Deputy General Manager, 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 7<sup>th</sup> day of October 2024.

**PETITIONER** 

POWER GRID CORPORATION OF INDIA LTD.

**GURGAON** 

DATED: 07.10.2024

Zarrul Hasan

General Manager (Commercial)

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

Petition	No	/TT/
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IN THE MATTER OF: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for 1x500 MVA, 400/220 kV ICT augmentation along with associated bays at Shujalpur (PG) substation under "ICT augmentation at 2x315 MVA, 400/220 kV Shujalpur (PG) substation" 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**

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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

- 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

10

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 Asset which are implemented under "ICT augmentation at 2x315 MVA, 400/220 kV Shujalpur (PG) substation" in Western Region.

Asset No		Asset Name					Remark
Asset	_	tation alo	400/220 ng with asso substation			13.01.2023	Earlier covered under petition no. 321/TT/2023

# (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	Approved Cost as	Expenditure Up to	Exp	Expenditure during 2019-24 tariff block					
No.	per	31.03.2019/ DOCO	2019-20	2020-21	2021-22	2022-23	2023-24	Completion Cost as on 31.03.2024	
Asset	3282.98	468.66				109.13	2113.64	2691.43	

# Rs in lakhs

Asset	Approved Cost as	Expenditure	Estimated	expenditu	re during :	2024-29 ta	riff block	Estimated completion
No.	No por	Up to	2024-25	2025-26	2026-27	2027-28	2028-29	Cost as on 31.03.2029
Asset	3282.98	2691.43	192.87					2884.30

- 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.
- 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
	AFC approved	NA	NA	NA	74.57	502.19
Asset	Revised AFC based on truing up	NA	NA	NA	76.00	551.95

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	647.66	661.16	658.52	656.54	655.78

**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
			Earlier
	1x500 MVA, 400/220 kV ICT		covered
Asset	augmentation along with associated	13.01.2023	under
	bays at Shujalpur (PG) substation		petition no.
			321/TT/2023

# 10. Cost detail:

The details of admitted cost for the assets covered in instant petition as per Hon'ble Commission order dated 18.04.2024 in petition no. 321/TT/2023 (Encl-1) for 2019-24 tariff block, and claimed cost now is given hereunder:

# For Asset:

(Rs in lakhs)

Cost allowe	d (A) as per o	rder in pe	etition no	. 321/TT/	2023			
Cost as per	s per Capital cost Add cap during						Capital	
FR/RCE	as on		During 2019-24					
	31.03.2019/	2019-20 2020-	2020-21	2020-21 2021-22	2022-23	2023-24	31.03.2024	
	DOCO							
3282.98	468.66	NA	NA	NA	31.14	1730.58	2230.38	
Cost claime	d (B) in the in	stant pet	ition					
3282.98	468.66	NA	NA	NA	109.13	2113.64	2691.43	
Variation (B-A)	0.00	NA	NA	NA	77.99	383.06	461.05#	



# Add - Cap approved by the Commission in petition no: 321/TT/2023 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:

			A	sset			
Expenditure	Land	Building & civil work	Trans. Lines	Sub- Station	Comm. Sys. excluding Fiber Optic	I.T Equipment including software	Total
As per auditor certificate (upto DOCO)	0.00	0.00	0.00	476.14	0.00	0.00	476.14
Less: Disallowed IDC+IEDC *	0.00	0.00	0.00	7.48	0.00	0.00	7.48
Expenditure Upto DOCO	0.00	0.00	0.00	468.66	0.00	0.00	468.66
Expenditure in 2022-23	0.00	0.00	0.00	109.13	0.00	0.00	109.13
Expenditure in 2023-24	0.00	0.00	0.00	2085.39	0.00	28.25	2113.64
Estimated Expenditure in 2024-25	0.00	20.00	0.00	172.87	0.00	0.00	192.87
Total Estimated Completion Cost	0.00	20.00	0.00	2836.05	0.00	28.25	2884.30

<sup>\*</sup>The entire IDC of Rs. 1.19 Lakhs and IEDC of Rs. 6.29 Lakhs disallowed due to non-condonation of delay in petition no. 321/TT/2023 i.r.o. above Asset from DOCO Cost.



# 10.2 Initial spares:

The details of admitted initial spare for the asset covered in instant petition as per Hon'ble Commission order dated 18.04.2024 in petition no. 321/TT/2023 for 2019-24 tariff block, and claimed initial spare now is given hereunder:

₹ in Lakhs

	Initial Spare allov	ved as per ord	er in petition no. 321/ī	TT/2023	
Head	Plant and Machinery cost for calculation of initial spares (A)	Ceiling limit as per Regulation s (in %) (X)	Allowable initial spares C= (A-B) *X/(100-X)	Initial spares claimed (B)	Excess initial spares
SS	2369.97	6	142.91	131.03	Nil
	Initial Sp	oare claimed ir	the instant petition		
SS	2791.86	6	169.77	132.19	Nil

Rs. 131.03 lakhs Initial spares has already been allowed by Hon'ble commission vide order dated 18.04.2024 in petition no. 321/TT/2023 (Refer paragraph 34 of the order).

Further, the initial spares claimed (Rs. 132.19 lakhs) in the instant petition are within the specified limits as per Regulation 23 of CERC Tariff Regulations, 2019. Thus, Hon'ble Commission is requested to kindly allow the spares as claimed in the instant petition.

# Capital cost details for 2024-29 tariff block:

## Rs in Lakhs

Asset Cost as Expend	Expenditure	Estimated	Estimated expenditure during 2024-29 tariff block					
No.	Up to	Up to 31.03.2024	2024-25	2025-26	2026-27	2027-28	2028-29	Cost as on 31.03.2029
Asset	3282.98	2691.43	192.87					2884.30

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

# Additional capitalization claims under Regulation:

SI No.	Asset	DOCO/Effective DOCO date	Cutoff date
1,.	Asset	13.01.2023	31.01.2026



# Add cap for 2019-24 block:

Asset		Add cap details (Rs. Lakhs)						
	2019-20	2020-21	2021-22	2022-23	2023-24			
	NA	NA	NA	109.13	2113.64			
Asset		NA		Claimed under Regulat	ion 24(1)(a) and			
		NA		24(1)(b) of the 2019 Ta	riff Regulations			

# Add cap for 2024-29 block:

Asset	Add cap detail (Rs. Lakhs)							
	2024-25	2025-26	2026-27	2027-28	2028-29			
	192.87							
Asset	Claimed under Regulation 24(1)(a) and 24(1)(b) of the		No Ad	dd Cap				
	2024 Tariff Regulations	r:						

# 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.

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

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

The above Effective Tax percentage shall be applied by the petitioner in arriving out the Grossed-up ROE rate in all cases of truing up petitions to be filed for the period 2019-24. It is submitted that effective rate of tax considered for FY 2019-20 and 2020-21 are based.

on Assessment Order issued by Income-Tax authorities, for the purpose of grossing up of ROE rate and that the effective rate of tax considered for F/Y 2021-22 and F/Y 2022-23 are based on the Income-tax returns filed, for the purpose of grossing up of ROE rate of respective years. Further, for F/Y 2023-24, pending filing of ITR, effective tax rate is calculated based the applicable MAT rate (i.e. MAT 15% + Surcharge 12.00% + Cess 4%), for the purpose of grossing up of ROE rate.

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

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

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

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
Combined	AFC approved	NA	NA	NA	74.57	502.19
Asset	Revised AFC based on truing up	NA	NA	NA	76.00	551.95

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	647.66	661.16	658.52	656.54	655.78
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 <a href="https://www.powergrid.in">www.powergrid.in</a>.

- 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 Expanses:**

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

#### Insurance:

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

#### **Capital Spare:**

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

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

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) 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.
- c) 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.
- d) 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.

e) 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.

f) 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.

g) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall insurance expenses and consequential IOWC on that insurance expenses

as mentioned at para 19 above.

h) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming

the overall capital spares as mentioned at Para 19 above.

i) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a

separate petition as mentioned at para 20 above.

i) Allow the Petitioner to bill and recover GST on Transmission Charges separately from

the respondents, if GST on transmission is levied at any rate in future. Further, any

taxes including GST and duties including cess etc. imposed by any

statutory/Govt./municipal authorities shall be allowed to be recovered from the

beneficiaries.

and pass such other relief as Hon'ble Commission deems fit and appropriate under the

circumstances of the case and in the interest of justice

FILED BY

**GURGAON** 

POWER GRID CORPORATION OF INDIA LTD.

DATED: 07.10.2024

REPRESENTED BY

Zafrul Hasan

General Manager (COMMERCIAL)

# BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION,

# **NEW DELHI**

P	etit	io	n	N	lo		1	T	T	7	

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 1x500 MVA, 400/220 kV ICT augmentation along with associated bays at Shujalpur (PG) substation under "ICT augmentation at 2x315 MVA, 400/220 kV Shujalpur (PG) substation" 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

---RESPONDENTS

Ltd.

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 Powergrid Corporation of India Ltd., having its registered Office at B-9, Institutional Area, Katwaria Sarai, New Delhi-110 016, do hereby solemnly affirm and state as under: -

1. That the deponent is the General Manager of Petitioner and is well conversant with the facts and the circumstances of the case and therefore competent to swear this affidavit.

- 2. That the accompanying Petition under Section 62 of the Electricity Act, 2003, has been filed by my authorised representative/nominated counsel under my instruction and the contents of the same are true and correct to the best of my knowledge and belief.
- 3. That the contents of Para 01 to 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 7<sup>th</sup> day of October' 2024 that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.

(DEPONENT)







# पावर गिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड (भारत सरकार का उद्यम) POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)

Ref: CC/Commercial/2024

Date: 28.08.2024

# LETTER OF AUTHORIZATION

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

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

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

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

Dilip Nagesh Rozekar

Executive Director (Commercial & RC)

दिलीप रोजेकर / DILIPROZEKAR Executive Director (Commercial & Regulatory Cell) पावर ग्रिंड कॉपॅरिशन ऑफ इंडिया लिमिटेड

Power Grid Corporation of India Ltd. (1970) (AGovt. of India Enterprise) @ Gurgaon- 122 001 (Haryana)

# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## Petition No. 321/TT/2023

Coram:

Shri Jishnu Barua, Chairperson Shri Arun Goyal, Member Shri P. K. Singh, Member

Date of Order: 18.04.2024

#### In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for determination of transmission tariff from COD to 31.3.2024 for 1x500 MVA, 400/220 kV ICT augmentation along with associated bays at Shujalpur (PG) Sub-station under "ICT augmentation at 2x315 MVA, 400/220 kV Shujalpur (PG) Sub-station" 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.

- Madhya Pradesh Power Management Company Limited, Shakti Bhawan, Rampur, Jabalpur-482008.
- 2. Madhya Pradesh Audyogik Kendra, Vikas Nigam (Indore) Limited, 3/54, Press Complex, Agra-Bombay Road, Indore-452008.
- Maharashtra State Electricity Distribution Company Limited, Hongkong Bank Building, 3<sup>rd</sup> Floor, M. G. Road, Fort, Mumbai-400001.
- Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara-390007.
- Electricity Department,
   Government of Goa,
   Vidyut Bhawan, Panaji, Near Mandvi Hotel, Goa-403001.
- 6. Electricity Department, Administration of Daman & Diu, Daman-396210.

ATTESTED TRUE COPY

Power Grid Corporation of India Ltd.

Power Grid Corporation of India Ltd.

Plot No. 2, Sector-29, Gurgaon-122001 (HARVA)





Order in Petition No. 321/TT/2023

- DNH Power Distribution Corporation Limited,
   Vidyut Bhawan, 66 kV Road, Near Secretariat Amli, Silvassa-396230.
- 8. Chhattisgarh State Power Distribution Company Limited, P.O. Sunder Nagar, Dangania, Raipur, Chhattisgarh-492013.
- 9. Madhya Pradesh Power Transmission Company Limited, Shakti Bhawan, Rampur, Jabalpur-482008.

:

...Respondent(s)

For Petitioner

Shri Zafrul Hasan, PGCIL

For Respondents

None

#### **ORDER**

Power Grid Corporation of India Limited has filed the instant petition for the determination of transmission tariff of 1x500 MVA, 400/220 kV ICT augmentation along with associated bays at Shujalpur (PG) Sub-station (hereinafter referred to as the "transmission asset") under "ICT augmentation at 2x315 MVA, 400/220 kV Shujalpur (PG) Sub-station" (hereinafter referred to as the "transmission project") in Western Region for the period from COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations").

- 2. The Petitioner has made the following prayers in the instant petition:
  - "1) Condone the delay in the commissioning of assets covered under this petition.
  - 2) Approve the Transmission Tariff for the tariff block 2019-24 block for the assets covered under this petition, as per para –7.
  - 3) Admit the capital cost as claimed in the Petition and approve the Additional Capitalization incurred/projected to be incurred.
  - 4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to a change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8 above for respective block.
  - 5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on the 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 the petition.



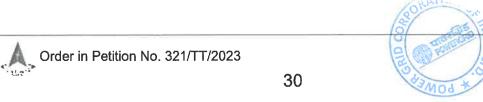


- 6) Allow the petitioner to bill and recover Licensee fees and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
- 7) Allow the petitioner to bill and adjust the impact on Interest on Loan due to a change in the Interest rate on account of the floating rate of interest applicable during the 2019-24 period, if any, from the beneficiaries.
- 8) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents if GST on transmission is levied at any rate in the future. Further, any taxes including GST and duties including cess, etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.
- 9) Allow interim tariff in accordance with Regulation 10(3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for the purpose of inclusion in the PoC charges.

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

#### Background

- 3. The brief facts of the case are as follows:
  - a. The Petitioner has submitted that the scheme was approved in the 2nd meeting of WRPC (TP) held on 4.9.2020 and the 4th meeting of the National Committee on Transmission held on 20.1,2021 and 28.1.2021.
  - b. CTUIL, vide letter ref: CTU/00/AI/RTM dated 16.7.2021, has assigned the implementation of the above schemes to the Petitioner under the Regulated Tariff Mechanism (RTM).
  - c. The Investment Approval (IA) of the transmission project was accorded by the Petitioner's CMD vide Memorandum dated 7.10.2021 at an estimated cost of ₹3283 lakh, including Interest During Construction (IDC) of ₹0.96 lakh based on June 2021 price level.
  - d. The Petitioner also submitted that as per the 4th meeting of the National Committee on Transmission (NCT) held on 20.1.2021 and 28.1.2021, the implementation time frame of the transmission asset has been scheduled to match the reconductoring of the 220 kV Shujalpur (PG)-Shujalpur (MP) D/C line, to be implemented by MPPTCL.





- MPPTCL, vide letter ref: 04-02/PSP-14/1797 dated 26.7.2021, e. communicated that the reconductoring of 220 kV Shujalpur (PG)-Shujalpur (MP) D/C line would be completed by October, 2022. Accordingly, it was specified in the IA that the scheduled COD of the transmission asset is October 2022.
- f. The scope of work covered under the transmission project is as follows:
  - 1x500 MVA, 400/220 kV ICT augmentation along with associated bays at Shujalpur (PG)

# 400 kV

Transformer Bays

: One

500 MVA, 400/220 kV ICT

: One

# 220 kV

**Transformer Bays** 

One

The present petition covers approval of tariff based on actual expenditure incurred up to actual COD and projected additional capitalization from COD to 31.3.2024 in respect of the transmission assets, which is as follows:

					(₹ in lakh)
	Expenditure		ACE		Estimated
FR approved cost	Up to actual COD	2022-23	2023-24	2024-25	completion cost
3282.98	476.14	31.14	1730.58	232.04	2469.90

- The Respondents, mainly beneficiaries of the Western Region, are distribution 5. licensees, transmission licensees, and power departments, which are procuring transmission services from the Petitioner.
- The Petitioner has served the petition on the Respondents and notice regarding filing 6. of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner.





Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No. 1, has filed its reply, vide affidavit dated 16.1.2024, and Maharashtra State Electricity Distribution Company Limited (MSEDCL), Respondent No. 3, has filed its reply, vide affidavit dated 15.1.2024. The Petitioner has filed its rejoinder to the reply of MPPMCL, vide affidavit dated 24.1.2024. The submissions by MPPMCL and MSEDCL and clarifications given by the Petitioner thereto have been dealt with in the relevant portions of this order.

- 7. The hearing in this matter was held on 15.12.2023, and the order was reserved. This order is issued considering the submissions made by the Petitioner in the petition, the Petitioner's affidavit dated 16.1.2024, MPPMCL's reply dated 16.1.2024, and the Petitioner's rejoinder vide affidavit dated 24.1.2024, and MSEDCL's reply dated 15.1.2024.
- 8. Having heard the learned counsels for the Petitioner and Respondents and perused the material on record, we proceed to dispose of the Petition.

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

The Petitioner has claimed the following transmission charges in respect of the 9. transmission asset for the period from COD to 31.3.2024:

		(₹ in lakh)		
Particulars	2022-23 (pro-rata for 78 days)	2023-24		
Depreciation	5.56	73.05		
Interest on loan	5.54	69.82		
Return on equity	5.92	77.34		
Interest on working capital	2.33	13.05		
O&M expenses	55.48	268.25		
Total AFC	74.83	501.51		

10. The Petitioner has claimed the following Interest on Working Capital (IWC) in respect of the transmission asset for the period from COD to 31.3.2024:





		(₹ in lakh)
Particulars	2022-23 (pro-rata for 78 days)	2023-24
O&M Expenses	21.64	22.35
Maintenance Spares	38.94	40.24
Receivables	43.17	61.66
Total Working Capital	103.75	124.25
Rate of Interest (in %)	10.50	10.50
Interest on Working Capital	10.89	13.05
Pro rata Interest on Working Capital	2.33	13.05

#### Date of Commercial Operation (COD)

- 11. The Petitioner has claimed the COD of the transmission asset as 1.11.2022. The Petitioner has submitted that the entire scope of the transmission project is complete and is covered under the instant petition. The Petitioner has further submitted that as per the IA, the SCOD of the transmission asset was 1.11.2022, against which the Petitioner was able to achieve the COD on 13.1.2023. Thus, there is a time over-run of 73 days. The Petitioner has attributed the time over-run of 73 days to challenges posed by the outbreak of the third wave of COVID-19, which disrupted the global supply chain. The Petitioner also added that it was required to complete the works matching with the completion of reconductoring works of 220 kV Shujalpur (PG)-Shujalpur (MP) D/C line being carried out by MPPTCL, which was completed by MPPTCL on 7.12.2022.
- 12. In support of the transmission asset's COD, the Petitioner has submitted a copy of the CEA certificate dated 16.12.2022, WRLDC certificate dated 13.2.2023, COD letter dated 13.2.2023 and CMD certificate.
- 13. We have considered the Petitioner's submissions. Taking into consideration the documents submitted by the Petitioner, the COD of the transmission asset is approved as 13.1.2023.





# **Capital Cost**

- 14. 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;
  - (I) 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
- in case or nydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."
- 15. The Petitioner has submitted the Auditor's Certificate and has claimed the following capital cost incurred as on COD and has projected Additional Capital Expenditure (ACE) in respect of the transmission asset:

(₹ in lakh)

FR approved	Cost up to	Additional	Capital Expe	nditure	Estimated
cost	COD	2022-23	2023-24	2024-25	completion cost
3282.98	476.14	31.14	1730.58	232.04	2469.90

16. The Petitioner has submitted that as against the FR approved cost of ₹3283.98 lakh, the estimated completion cost is ₹2469.90 lakh. Therefore, there is no cost overrun in the case of the transmission asset. The Petitioner has submitted that the variation in the cost is due to a decrease in the sub-station equipment, including initial spares, and a decrease in the IDC and IEDC. The detailed reasons submitted by the Petitioner for the cost variation are as follows:





# a, Sub-station Equipment including Initial Spares-decrease of ₹412 lakh

As regards item-wise cost variation, an open competitive bidding route is followed for procuring the items by providing equal opportunity to all eligible firms, the lowest possible market prices for required products/ services are obtained, and contracts are awarded based on the lowest evaluated eligible bidder. The best competitive bid prices against tenders may be lower or higher than the cost estimate, depending upon prevailing market conditions. As regards the variation in the cost of individual items in sub-station packages, the packages under the scope of works comprise a large number of items, and the same are awarded through open competitive bidding. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items under the said package. Further, the lowest bidder can be arrived at/evaluated on an overall basis. Hence, item-wise unit prices in contracts and their variation over the unit rate considered in FR estimates are beyond the control of the Petitioner.

### b. IDC-decrease of ₹095 lakh

The decrease in IDC is attributable to variation in the rate of interest considered in FR v/s Actuals, decrease in overall capital cost w.r.t. FR, and deployment of funds based on actuals. The rate of interest considered in FR was 9% on domestic loans subject to actuals vis-à-vis, which the actual IDC incurred up to COD has been considered in the Auditor certificate.

#### c. IEDC and contingency-decrease of ₹306 lakh

In IA, IEDC and contingency have been considered @ 10.75% and 3%, respectively, whereas the actual expenditure under the subject head incurred up to COD, IEDC, has been considered in the Auditor Certificate.





17. We have considered the Petitioner's submissions. We are of the view that cost variation is due to reasons beyond the Petitioner's control. Therefore, the cost variation is allowed.

### Time Over-run

- 18. The Petitioner submitted that as per the IA dated 7.10.2021, the transmission project was scheduled to be put into commercial operation by 1.11.2022. The actual COD was 13.1.2023 and there is a time overrun of 73 days. The Petitioner has submitted that the time over-run was due to the time taken to match the transmission asset with the reconductoring of 220 kV Shujalpur (PG)-Shujalpur (MP) D/C line being implemented by MPPTCL and the third wave of Covid-19 pandemic. The detailed reason submitted by the Petitioner for the time over-run is as follows:
  - a. Matching timeline with reconductoring works being executed by MPPTCL

As per the 4th meeting of the National Committee on Transmission (NCT) held on 20.1.2021 and 28.1.2021, the implementation time frame of the transmission asset was to be scheduled so as to match the completion of the reconductoring of 220 kV Shujalpur (PG)-Shujalpur (MP) D/C line being implemented by MPPTCL. MPPTCL vide letter ref: 04-02/PSP-14/1797 dated 26.7.2021, had communicated that the reconductoring of 220 kV Shujalpur (PG)-Shujalpur (MP) D/C line would be completed by October 2022. Accordingly, in the IA, the SCOD of the transmission project was kept in October 2022. Further, the implementation schedule of reconductoring works was also discussed in the 35<sup>th</sup>, 36<sup>th</sup>, and 37<sup>th</sup> JCC Meetings dated 28.3.2022, 27.6.2022, and 27.9.2022 respectively, and in the 38<sup>th</sup> JCC meeting, it was updated that the works were expected to be completed by December 2022. The Petitioner has, therefore, carried out the





works matching the timeline agreed upon in the JCC meetings. MPPTCL has informed that the reconductoring of 220 kV Shujalpur (PG)- Shujalpur (MP) D/C was completed on 7.12.2022. In spite of the aforementioned constraints of a compressed schedule, the transmission asset achieved COD nearing the matching time frame of the reconductoring works.

### b. Time over-run due to 3<sup>rd</sup> wave of the Covid-19 pandemic

Due to the outbreak of the third wave of Covid-19, the global supply chain was disrupted between November 2021 and February 2022. Consequently, ICT manufacturers faced constraints in the timely supply, delivery, and installation of ICT along with associated bays within the compressed IA timeline. Due to the impact of the Covid-19 pandemic third wave, the Petitioner's offices also remained functional only with a limited staff during this period.

- 19. In response, MPPMCL has submitted that the prayer of the Petitioner to condone the delay on account of the third wave of the Covid-19 pandemic is not justified. The effects of the third wave of Covid-19 mentioned in the petition occurred about one year before the SCOD of the transmission asset and accordingly the delay/time over-run in execution may not be attributable to Covid-19.
- 20. MSEDCL has submitted that the Petitioner's prayer to condone the delay on account of the Covid-19 pandemic, as the supply chain was disrupted from (November 2021 to February 2022), is not justified as there was no nationwide lockdown due to the third wave of the COVID-19 pandemic. Therefore, the Petitioner is solely liable to bear the transmission charges for the period of time over-run.
- 21. The Petitioner, in its rejoinder to the reply filed by MPPMCL, has reiterated its earlier submissions. The Petitioner has further submitted that MoP, taking into cognizance the





difficulties faced, issued a letter dated 13.5.2022 mandating the transmission project developers to approach the Commission for relief. The Petitioner has also submitted that the time over-run is beyond the control of the Petitioner and has prayed to condone the same.

- 22. We have considered the submissions of the Petitioner and the Respondents. The Petitioner has attributed the time over-run of 73 days to the third wave of the Covid-19 pandemic and the requirement to match the transmission asset with the reconductoring works being carried out by MPPTCL for the 220 kV Shujalpur (PG)-Shujalpur (MP) D/C line. MPPMCL and MSEDCL have submitted that the time over-run is attributable to the Petitioner, and it may not be condoned. As regards the Petitioner's contention that the time over-run was on account of logistical challenges faced by ICT manufacturers due to the third wave of the Covid-19 pandemic, it is observed that the Petitioner has not submitted any document to substantiate that the Petitioner was specifically affected by the third wave of Covid-19 pandemic and the period of time over-run on account of the same.
- 23. The Petitioner has submitted that the implementation of 500 MVA ICT along with bays at Shujalpur (PG) has been scheduled to be commissioned, matching with the reconductoring of the 220 kV Shujalpur (PG)-Shujalpur (MP) D/C line of MPPTCL.
- 24. We have gone through the submissions of the Petitioner. The relevant extracts of the minutes of the 4th meeting of "The National Committee on Transmission" (NCT) held on 20.1.2020 and 28.1.2020 are as follows:
  - 5.2 System Strengthening at Shujalpur on account of operational constraints ((n-1) non compliance):
  - 5.2.1 The operation feedback of NLDC for the period October 15- March 16 was discussed in the 40th meeting of SCMPSPWR held on 01/06/2016, which interalia included the issue of ICT constraint at Shujalpur (PG). It was observed that loading on ICTs at Shujalpur (2X315 MVA) are above 200 MW and additional ICT has to be proposed. In the meeting, MPPTCL suggested that the issue of ICT overloading would be resolved with coming of RE





generations in Shujalpur area. However, if sustained overloading of ICT is observed, then augmentation may be taken up.

5.2.2 Subsequently, in the 2nd meeting of WRPC(TP) held on 04.09.2020, based on POSOCO's inputs regarding persistence of (n-1) non-compliance at Shujalpur (PG), 1x500MVA, 400/220kV ICT augmentation at 2x315 MVA, 400/220 kV Shujalpur (PG) has been agreed. Also, it was observed that with additional ICT at Shujalpur, loading on the Shujalpur (PG) - Shujalpur (MPPTCL) 220 kV D/C line would further increase. Therefore, Reconductoring of Shujalpur (PG)-Shujalpur (MP) 220kV D/c line (conductor with ampacity equivalent to ACSR twin moose at nominal voltage) under Intra-state by MPPTCL has also been agreed.

The following System Strengthening at Shujalpur on account of operational constraints ((n-1) noncompliance) has been agreed in 2<sup>nd</sup> meeting of WRPC (TP):

- A. ICT Augmentation of 2x315 MVA, 400/220 kV Shujalpur(PG) substation under ISTS by 1x500MVA, 400/220kV ICT augmentation at Shujalpur (PG)
- B. Re-conductoring of Shujalpur (PG)-Shujalpur (MP) 220kV D/c line (conductor with ampacity equivalent to ACSR twin moose at nominal voltage) under Intra –state by MPPTCL.
- 5.2.3 Director, CEA informed that MPPTCL vide its letter dated 01.12.2020 has enquired whether the above proposed system strengthening works was associated with Phase-II works of power evacuation from Rajgarh SEZ or it was to be taken up independently. MPPTCL has further submitted that HTLS conductor equivalent to ACSR twin moose capacity for 220 kV may not be available in Indian Market and it may not be possible to use conductor with ampacity equivalent to ACSR twin moose at nominal voltage on the existing towers of 220 kV Shujalpur (PG)-Shujalpur (MP) 220kV D/c line. MPPTCL has requested for confirmation of conductor capacity requirement whether ACSR twin moose or twin Zebra.
- 5.2.4 Members deliberated and agreed that both the schemes (ICT augmentation at Shujalpur under inter-state and 220 kV line reconductoring under intra-state) was required to overcome operational constraints and were not to be linked with Rajgarh SEZ evacuation system. Further, both the scheme needs to be implemented in similar time frame.
  5.2.5 Director, CEA stated that the confirmation of the conductor ampacity requirement whether ACSR twin moose or twin Zebra would be deliberated and confirmed to MPPTCL in
- 5.2.6 After detailed deliberations, NCT approved the following transmission scheme to be implemented under ISTS
- ICT Augmentation at 2x315 MVA, 400/220 kV Shujalpur(PG) substation under ISTS by 1x500MVA, 400/220kV ICT augmentation at Shujalpur (PG) alongwith associated bays

Implementation time frame: In matching time frame of Reconductoring of Shujalpur (PG) Shujalpur (MP) 220kV D/c line by MPPTCL"

25. MPPTCL, vide letter dated 26.7.2021, had communicated that the reconductoring of the 220 kV Shujalpur(PG)-Shujalpur(MP) D/c line would be completed by October, 2022. The Relevant extracts of the letter dated 26.7.2021 are as follows:





the next WRPC-TP.

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Note No. W1

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Note No. #20

Attachment:MPPTCL Letter 27July21.PDF

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Spri Arnos Pal, Dy Chief Operating Officer (CTLI-WR Phasolag), Power Grad Corporation of India (PGCL), "Seudemins", Pht No.2, Sector-29, GERGGART IJLANYANA-123001;

auhok@nowererid.in

Sub. ICT augmentation at 2x315 MVA, 400/220kV Shoptpur(PG) \$Js. Your E-mail dated 19:07.2021

Do the subject matter in reference to E-mail dated 19,07.7021 Dom Sini Singh, Manager(CTU) regarding implementation time line of conductoring work, it is to intiniste that re-conductoring work of Shujalpur(PG) Shujaipur(MP) 220kV line is scheduled for completion up to October-2022. It is, therefore, represed to kindly ensure installation of additional ICT at Shujalpur(PO) She accordingly.

Chief Euglider (Pig. & Preign) MPTCI, Inbulgar

Copy to a 1. The Executive Director, Power Grid Corporation of India Ltd (PGCIL), WRTS-II, Regional Head Quarters, Plut No.54, Near Riya Revu Reson, Sami Savi, Road, Vadadara-190008 (GI).

The Chief Engineer (Procurement), MPPTCI., Jabatpur

- From the above, it is observed that 500 MVA ICT along with bays at Shujalpur (PG) 26. has been scheduled to be commissioned matching with the reconductoring of 220 kV Shujalpur (PG)-Shujalpur (MP) D/C line of MPPTCL (October 2022) by the Petitioner. MPPTCL completed the reconductoring works of the 220 kV Shujalpur (PG)-Shujalpur (MP) D/C line on 7.12.2022, and thereafter, the Petitioner completed the 500 MVA ICT on 13.1.2023. We are of the view that the said assets were required to be completed matching with the reconductoring works of the 220 kV Shujalpur (PG)-Shujalpur (MP) D/C line. Therefore, the delay of 36 days on account of matching COD with the MPPTCL line is condoned. However, in the absence of any evidence of direct impact on the works due to the third wave of Covid-19, the delay of 37 days beyond 7.12.2022 is not condoned.
- 27. As discussed above, out of the total time overrun of 73 days in commissioning of the instant transmission asset, 36 days are condoned. However, the delay of 37 days beyond 7.12.2022 is not condoned.





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

- 28. The Petitioner has submitted that the entire IEDC incurred has been discharged up to COD. Further, with regard to IDC, the Petitioner submitted that the accrued IDC of `0.82 lakh has been excluded from the capital cost as on COD and has been claimed after it was discharged as part of additional capitalization incurred in 2022-23.
- 29. The Commission has allowed IDC and IEDC till 7.12.2022. As the Petitioner has drawn a loan after 7.12.2022, the entire IDC of ₹1.19 lakh claimed has been disallowed. Further, the Petitioner has claimed an IEDC of ₹78.74 lakh and has submitted an Auditor's Certificate in support of the same, out of which an amount of ₹6.29 lakh has been disallowed on account of partial condonation of time over-run.
- 30. The Commission has computed the allowable IDC and IEDC after pro-rata excluding the IDC and IEDC corresponding to delay not condoned. The IDC and IEDC allowed is as follows:

(₹ in lakh)

IDC claimed	IDC disallowed	IDC allowed	IEDC claimed	IEDC disallowed due to time over- run not condoned	IEDC allowed
1.19	1.19	0.00	78.74	6.29	72.45

### **Initial Spares**

- 31. Regulation 23(d) of the 2019 Tariff Regulations provides that Initial Spares shall be capitalised as a percentage of plant and machinery cost up to the cut-off date, subject to the following ceiling norms.
  - "(d) Transmission System
  - (i) Transmission line: 1.00%
  - (ii) Transmission sub-station
    - (Green Field): 4.00%
    - (Brown Field): 6.00%





- (iii) Series Compensation devices and HVDC Station: 4.00%
- (iv) GIS Insulated Sub-station
  - (Green Field): 5.00%
  - (Brown Field): 7.00%
- (v) Communication System: 3.50%
- (vi) Static Synchronous Compensator: 6.00%"
- 32. Initial Spares have been claimed by the Petitioner as follows:

(₹ in lakh)

Head	Plant and Machinery cost for calculation of Initial Spares	Ceiling limit as per Regulations (in %)	Allowable Initial Spares	Initial Spares claimed	Excess Initial Spares
Sub-station	2369.97	6	142.91	131.03	Nil

- 33. The Petitioner has submitted that the Initial Spares claimed under the sub-station are within the allowable limits as per the 2019 Tariff Regulations.
- 34. We have considered the Petitioner's submissions. Initial Spares are allowed as per the percentage of the Plant and Machinery cost. The Petitioner's claim is within the norm under the 2019 Tariff Regulations, and it is, accordingly, allowed. The Initial Spares allowed for the transmission asset are as follows:

(₹ in lakh)

Head	Plant and Machinery cost for calculation of initial spares (A)	Ceiling limit as per Regulations (in %) (X)	Allowable Initial Spares C= (A- B)*X/(100-X)	Initial Spares claimed (B)
Sub-station	2369.97	6	142.91	131.03

### Capital Cost allowed as on COD.

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

(₹ in lakh)

Capital cost claimed till COD	Less: IDC disallowed	Less: IEDC disallowed	Capital cost as on COD
476.14	1.19	6.29	468.66





### Additional Capital Expenditure ("ACE")

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

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

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

- (1) The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
  - (a) Undischarged liabilities recognized to be payable at a future date;
  - (b) Works deferred for execution;
  - (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23of these regulations;
  - (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
  - (e) Change in law or compliance of any existing law; and
  - (f) Force Majeure events:

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

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

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

- (1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:
  - (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law:
  - (b) Change in law or compliance of any existing law;
  - (c) Deferred works relating to ash pond or ash handling system in the original scope of work;
  - (d) Liability for works executed prior to the cut-off date;
  - (e) Force Majeure events;
  - (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;

Raising of ash dyke as a part of ash disposal system.

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the





Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

- (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
- (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
- (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission."
- 37. The Petitioner has submitted that the element-wise details of ACE claimed have already been submitted in Form-7. The Petitioner has submitted that the additional capitalization is on account of any undischarged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations.
- 38. The Petitioner has submitted the following details of the liability flow statement:

(₹ in lakh)

		Discharged Amount			
Head/Part wise	Particulars	COD to 31.3.2023	Projected for 2023-24	Projected for 2024-25	
Due to Unexecuted work					
Toshiba T&D systems	Sub-station	30.01	1687.09	213.51	
(India) Private	IT Equipment	1.13	13.49	13.53	
, ,	Civil	-	20.00	-	
Toshiba T&D systems	Sub-station	-	9.93	4.97	
(India) Private	IT Equipment	_	0.07	0.03	
Due to discharge liability	Civil	-		_	
Total		31.14	1730.58	232.04	

- 39. The COD of the transmission asset is 13.1.2023, and the cut-off date of the transmission project is 13.1.2026. The projected ACE in 2024-25 is not allowed in this petition, and the same shall be dealt with in the 2024-29 tariff period as per the applicable tariff regulations.
- 40. We have gone through the Petitioner's submissions. The ACE is approved as the same was envisioned in the original scope of work and is allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. The ACE allowed is as follows:





(₹ in lakh)

Particulars	Capital cost as on COD	2022-23	2023-24	Capital cost as on 31.3.2024
ACE	468.66	31.14	1730.58	2230.38

### **Debt-Equity Ratio**

### 41. Regulations 18 of the 2019 Tariff Regulations provides as follows:

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

### Provided that:

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

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

- (2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.
- (3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

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

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

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



- (5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.
- (6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation."
- 42. The Petitioner has claimed a debt-equity ratio of 70:30, and the same has been considered by the Commission in accordance with Regulation 18 and is as follows:

Particulars	Capital cost as on COD (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	328.06	70.00	1561.26	70.00
Equity	140.60	30.00	669.11	30.00
Total	468.66	100.00	2230.38	100.00

### Depreciation

- 43. 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



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- 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."
- The Commission has considered the Petitioner's submissions. The IT equipment has 44. been considered as part of the gross block and depreciated using the Weighted Average Rate of Depreciation (WAROD). WAROD has been worked out and placed as the Annexure after considering the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e., IT assets have been considered 100% depreciable. Depreciation allowed for the transmission asset for the period from its COD to 31.3.2024 is as follows:

(₹ in lakh)

	Particulars	2022-23 (pro-rata for 78 days)	2023-24
Α	Opening Gross Block	468.66	499.80
В	Addition during the year 2019-24 due to projected ACE	31.14	1730.58
С	Closing Gross Block (A+B)	499.80	2230.38
D	Average Gross Block (A+C)/2	484.23	1365.09
E	Average Gross Block (90% depreciable assets)	483.10	1350.40
F	Average Gross Block (100% depreciable assets)	1.13	14.69
	Depreciable value (excluding IT equipment and software)		
G	(E*90%)	434.79	1215.36
Н	Depreciable value of IT equipment and software (F*100%)	1.13	14.69
П	Total Depreciable Value (G+H)	435.92	1230.05
J	Weighted average rate of Depreciation (WAROD) (in %)	5.29%	5.32%
K	Lapsed useful life at the beginning of the year (Year)	0	1
L	Balance useful life at the beginning of the year (Year)	25	24
M	Depreciation during the year (D*J)	5.48	72.65
N	Cumulative Depreciation at the end of the year	5.48	78.13
	Remaining Aggregate Depreciable Value at the end of the		
0	year	430.44	1151.92

### Interest on Loan (IoL)

- Regulation 32 of the 2019 Tariff Regulations provides as follows: 45.
  - "32. Interest on loan capital: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.





- (2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.
- (3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.
- (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.
- (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

- (5a) The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.
- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- (7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing".
- 46. The weighted average rate of interest on IoL (WAROI) has been considered on the basis of the rates prevailing as on COD for respective loans. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up.
- 47. loL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. loL allowed in respect of the transmission asset for the period from its COD to 31.3.2024 is as follows:





(₹	in	lakh)
11	111	Ianii)

	Particulars	2022-23 (pro-rata for 78 days)	2023-24
Α	Gross Normative Loan	328.06	349.86
В	Cumulative Repayments up to Previous Year	0.00	5.48
С	Net Loan-Opening (A-B)	328.06	344.38
D	Addition due to ACE	21.80	1211.41
E	Repayment during the year	5.48	72.65
F	Net Loan-Closing (C+D-E)	344.38	1483.14
G	Average Loan (C+F)/2	336.22	913.76
Н	Weighted Average Rate of Interest on Loan (in %)	7.60%	7.60%
II.	Interest on Loan (G*H)	5.46	69.45

### Return on Equity (RoE)

- 48. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide as follows:
  - "30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.
  - (2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

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

### Provided further that:

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

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

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





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

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

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

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

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

### Illustration-

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

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

- (ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:
- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1.000 crore:
- (b) Estimated Advance Tax for the year on above is Rs 240 crore;
- (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;
- (d) Rate of return on equity = 15.50/(1-0.24) = 20.395%.
- (3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax





paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any underrecovery 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."

49. The Petitioner has submitted that the MAT rate is applicable to it. MAT rate applicable has been considered for the purpose of RoE which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the transmission assets for the period from its COD to 31.3.2024 is as follows:

(₹ in lakh) 2022-23 2023-24 **Particulars** (pro-rata for 78 days) Α Opening Equity 140.60 149.94 Addition due to ACE 519.17 В 9.34 Closing Equity (A+B) 149.94 669,11 С 145,27 409.53 Average Equity (A+C)/2 D Ε Return on Equity (Base Rate) (in %) 15.50 15.50 Tax Rate applicable (in %) 17,472 17,472 18.782 Rate of Return on Equity (Pre-tax) (in %) 18.782 G 5.83 76.92 Н Return on Equity (Pre-tax) (D\*G)

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

50. O&M Expenses claimed by the Petitioner for the 2019-24 tariff period are as follows:

		(₹ in lakh)
Particulars	2022-23 (pro-rata for 78 days)	2023-24
O&M Expenses	55.48	268.25

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

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Ba	ys (₹ Lakh per bay	)			
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (	₹ Lakh per MVA)				
765 kV	0.491	0.508	0.526	0.545	0.564





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

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

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;





- v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years
- (b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.
- (c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

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

52. The O&M Expenses approved for the transmission asset for the period from its COD to 31.3.2024 is as follows:

		(₹ in lakh)
Particulars	2022-23 (pro-rata for 78 days)	2023-24
O&M Expenses	55.48	268.25

### Interest on Working Capital (IWC)

- 53. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations specify as follows:
  - "34. Interest on Working Capital: (1) The working capital shall cover:
  - (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
  - (i) Receivables equivalent to 45 days of annual fixed cost;
  - (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
  - (iii) Operation and maintenance expenses, including security expenses for one month."
  - "(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

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

- (4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency."
- "3. Definitions. In these regulations, unless the context otherwise requires:-





- (7) 'Bank Rate' means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;"
- 54. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on the COD of the transmission project. The Petitioner has considered the IWC rate as 10.50%.
- 55. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) considered is 10.50% for 2022-23 (SBI 1-year MCLR applicable as on 1.4.2022 of 7.00% plus 350 basis points), and for 2023-24 Rate of Interest (ROI) is considered as 12.00% (SBI 1-year MCLR applicable as on 1.4.2023 of 8.50% plus 350 basis points). The components of the working capital and interest allowed thereon for the transmission asset for the period from its COD to 31.3.2024 is as follows:

		(₹ in lakh)
Particulars	2022-23 (pro-rata for 78 days)	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	4.62	22.35
Working Capital for Maintenance Spares (15% of O&M Expenses)	8.32	40.24
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	9.17	61.74
Total Working Capital	22.12	124.24
Rate of Interest for working capital (in %)	10.50%	12.00%
Interest on working capital	2.32	14.92

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

56. The transmission charges allowed for the transmission asset for the period from its COD to 31.3.2024 are as follows:

Particulars	2022-23 (pro-rata for 78 days)	(₹ in la 2023-24
Depreciation	5.48	72.65
Interest on Loan	5.46	69.45
Return on Equity	5.83	76.92
O&M Expenses	55.48	268.25
Interest on Working Capital	2.32	14.92





Particulars	2022-23 (pro-rata for 78 days)	2023-24
Total	74.57	502.19

### Filing Fee and Publication Expenses

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

### Licence Fee and RLDC Fees and Charges

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

### Goods and Services Tax

- 59. The Petitioner has submitted that if GST is levied at any rate and at any point of time in the future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged 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.
- 60. The Respondents MPPMCL and MSEDCL have opposed the Petitioner's request as it is premature at this stage and have submitted that nothing can be allowed in anticipation of something that has not occurred.





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

### **Sharing of Transmission Charges**

- 62. With effect from 1.11.2020, the sharing of transmission charges is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the billing, collection, and disbursement of transmission charges approved in this order for the transmission asset shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.
- 63. To summarize, AFC allowed in respect of the transmission asset for the 2019-24 tariff period in this order are as follows:

		(₹ in lakh)
Particulars	2022-23 (pro-rata for 78 days)	2023-24
AFC	74.57	502.19

- 64. The Annexure to this order forms part of the order.
- 65. This order disposes of Petition No. 321/TT/2023 based on the above findings and discussions.

sd/- sd/- sd/-(P. K. Singh) (Arun Goyal) (Jishnu Barua) Member Member Chairperson

ıkh)		
(₹ in lakh	reciation	2023-24
	Annual Depreciation	2022-23
	ition Rate	(%

	Admitted	Projected ACE	ed ACE	Admitted	Depreciation Rate	Annual Depreciation	reciation
Capex	Capital Cost as on COD	2022-23	2023-24	Capital Cost as on 31.3.2024	(in %)	2022-23	2023-24
Building	00.00	00.0	20.00	20.00	3.34	00.0	0.33
Substation	468.66	30.01	1697.02	2195.69	5.28	25.54	71.13
PLCC	00.00	00.00	00.00	00.00	6.33	00.00	0.00
IT Equipment	00.00	1.13	13.56	14.69	15.00	80.08	1.19
Total	468.66	31.14	1730.58	2230.38		25.62	72.65
					Average Gross Block	484.23	1365.09

5.32%

5.29%

WAROD (in %)







Liability Flow Statement Name of Pettioner Project Name

DOCO:
13.01.2023
Name of Asset: 1.5500 MAA, 400/220 KV KCT augmentation along with associated bays at Shujalpur (PG) substation
ICT augmentation at 2.2315 MVA, 400/220 KV Shujalpur (PG) substation "in Western Region

10 Unexpectented Workty S.S. 2022-2.33 2023-2.44 Total ILG-9-cat 2023-2.44 Total ILG-9-cat 2023-2.44 Total ILG-9-cat 2023-2.33 2023-2.44 Total ILG-9-cat 2022-2.33 202	Asset No. Headwise /Partywise	Particulary	Year of Actual Capitalisation	Outstanding Liability as on COD 31,03.2019		50	Discharge					Additional Uab	Additional Liability Recognized <sup>A</sup>			Outstanding Liability as on 31.3.2024
10 Discharge (mg) Prt.   SS   2022-33   S   2022-33   S   2022-33   S   2016-06   2,157.21   S   2016-06   S   2,157.21   S   2016-06   S   2,157.21   S   S   2016-06   S   2,157.21   S   S   S   S   S   S   S   S   S									Total (19-24)	2019-20	2020-21	2021-22	2022-23	2023-24	Total (19-24)	
### Springer   March	- Due to Unexecuted Work					Ш										
TELUIPMENT 2002-23   TELUIPM	Toshiba T & D Systems (ind) Pvt.	SS	2022-23		T		109.13	2,016.08	2,125,21							
COUNT   2022-23		IT Equipement	2022-23					25.43	25.43							
Le Discharge of Liability         2002.2.3         Control           2002.2.3         2002.2.3         66.3.7           2002.2.3         2002.2.3         188.65         66.3.7           2002.2.3         2002.2.3         288.65         66.3.7           2002.2.3         2002.2.3         28.3         28.3           2002.2.3         471.7         106.1         2012.6		CIVIL	2022-23						2							
Lo Discharge of Lability         2022-23         2022-23         CORD-23         CORD-2			2022-23													
2002-23 168-65 6932 6932	- Due to Discharge of Liability		2022-23													
And To Systems (find) Prt.         TSS         2022-2-3         158.65           69.32           OVAIL.         TOX2-2-3         124.3           2.23           OVAIL.         2022-2-3         471.47          106.10         410.40         9.10			2022-23													
TEquipement 2002-23 283 . 2.83   . 2.83   . 2.83	Toshiba T & D Systems (Ind) Pvt.	SS	2022-23	168.65				69.32	69.32							99,33
CIVIL 2022-73 471.47 100-13 9.113-64		IT Equipement	2022-23	2.83				2.83	2.83							
171 47		CIVIL	2022-23						i.							
AUSTRIA LIBERT	Total			171.47			109.13	2,113.64	7,222,77		.*	2				99.33

rt No. Headwise /Partywise	Particulars	Year of Actual Capitalisation	Outstanding Liability as on COD 31.03.2024				Discharge		
				2024-25	2025-26	2026-27	2027-28	2028-29	Total (24-29)
- Due to Unexecuted Work									
Toshiba T & D Systems (Ind) Pvt.	\$2	2023-24		73.54					73.54
	IT Equipement	2023-24							
	CIVIL	2023-24		20.00					20:00
		2023-24							
- Due to Discharge of Liability		2023-24							
		2023-24							
Toshiba T & D Systems [Ind] Pvt.	SS	2023-24	99,33	99,33					99.33
	IT Equipement	2023-24							
	CIVIL	2023-24							
Total			99.33	192,87	è	×	-		192.87





### 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 "1X500MVA, 400/220kV ICT Augmentation alongwith Associated Bays at Shujalpur (PG)" under "ICT Augmentation at 2X315 MVA, 400/220 KV Shujalpur (PG) Substation" in Western Region - II of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 13.01.2023 is detailed as under:

(Rs. in Lakhs)

S/N	Particulars	Capital Cost	IEDC	IDC	Total
1	Expenditure up to 12.01.2023 (up to DOCO)	396.21	78.74	1.19	476.14
2	Expenditure from 13.01.2023 to 31.03.2023	109.13	0.00	0.00	109.13
3	Expenditure from 01.04.2023 to 31.03.2024	2,113.64	0.00	0.00	2,113.64
4	Estimated Expenditure from 01.04.2024 to 31.03.2025	192.87	0.00	0.00	192.87
	Total	2,811.85	78.74	1.19	2,891.78

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. Western Region-II, Vadodara as on 31.03.2024.

The estimated expenditure is based on Management estimate.

For G.D. Apte & Co.
Chartered Accountants

Firm Registration Number: 100 515W

UDIN: 24121007BKCKUD4209

Anagha M. Nanivadekar

Partner

Membership Number: 121007 Pune, September 06, 2024



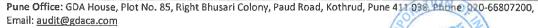
### **CERTIFICATE**

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost for "1X500MVA, 400/220kV ICT Augmentation alongwith Associated Bays at Shujalpur (PG)" under "ICT Augmentation at 2X315 MVA, 400/220 KV Shujalpur (PG) Substation" in Western Region - II of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 13.01.2023 is detailed as under:

(Rs. in Lakhs)

- 1								Aus. III rakiis
S/N	Particulars	Land	Building and Civil Works	Tr. Line	Sub- Station	PLCC/ Communica tion System	I. T Equipment including software	Total
1	Expenditure up to 12.01.2023 (up to DOCO)	0.00	0.00	0.00	476.14	0.00	0.00	476.14
2	Expenditure from 13.01.2023 to 31.03.2023	0.00	0.00	0.00	109.13	0.00	0.00	109.13
3	Expenditure from 01.04.2023 to 31.03.2024	0.00	0.00	0.00	2085.39	0.00	28.25	2113.64
4	Estimated Expenditure from 01.04.2024 to 31.03.2025	0.00	20.00	0.00	172.87	0.00	0.00	192.87
	Total	0.00	20.00	0.00	2843.53	0.00	28.25	2891.78





Mumbal Office: D-509 Neelkanth Business Park, Nathani Road, Vidyavihar (West) Mumbai 400085, Phone

3184



S/N	Particulars	TL	Sub-station / 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)	0.00	2791.86
2	Initial Spares included above	0.00	132.19

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

The estimated expenditure is based on Management estimate.

For G.D. Apte & Co. Chartered Accountants

Firm Registration Number: 100 515W

UDIN: 24121007BKCKUD4209

Anagha M. Nanivadekar

Partner

Membership Number: 121007 Pune, September 06, 2024 vol

Pune Office: GDA House, Plot No. 85, Right Bhusari Colony, Paud Road, Kothrud, Pune 411 038. Phone: 020-66807200 Email: audit@gdaca.com

Mumbai Office: D-509 Neelkanth Business Park, Nathani Road, Vidyavihar (West) Mumbai 400036, Phone 022-3512

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### **Summary of Tariff**

Form No. - 1

Name of the	Fransmission Licensee:	Power Grid Corporation	on of India Limited	
Project	ICT Augmentation at 23	315 MVA 400/220 KV	Shujalpur (PG) Sub	ostation
Element Description	1X500 MVA, 400/220 k	V ICT augmentation al	ong with associated	d bays Shujalpur (PG)
Region	Western Region		DOCO Date	Jan 13, 2023

(Amount in Rs. Lakh)

			() tillodittill ()	
2019-20	2020-21	2021-22	2022-23	2023-24
0.00	0.00	0.00	365.00	366.00
0.00	0.00	0.00	78.00	366.00
0.00	0.00	0.00	5.90	87.68
0.00	0.00	0.00	6.19	89.25
0.00	0.00	0.00	6.09	91.12
0.00	0.00	0.00	2,34	15.65
0.00	0.00	0.00	55.48	268.25
0.00	0.00	0.00	76.00	551.95
	0.00 0.00 0.00 0.00 0.00	0.00 0.00  0.00 0.00  0.00 0.00  0.00 0.00  0.00 0.00  0.00 0.00  0.00 0.00	0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00	2019-20         2020-21         2021-22         2022-23           0.00         0.00         0.00         365.00           0.00         0.00         0.00         78.00           0.00         0.00         0.00         5.90           0.00         0.00         0.00         6.19           0.00         0.00         0.00         6.09           0.00         0.00         0.00         55.48

(Petitioner)

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

Name of the Tr	Name of the Transmission Licensee   Power Grid Corporation of India Limited		
Project	ICT Augmentation at 2x315 MVA 400/220 KV Shujalpur (PG) Substation	ation	
Element Description	1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)	ays Shujalpur (PG)	
Region	Western Region	DOCO Date	Jan 13, 2023

1. Transmission Lines

(Amount in Rs. Lakh)

Summary:

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O ORATION OF THE PORT OF THE P

2. Sub Station

	Type of Voltage	Voltage	No. of Transfor ms/		No.	No. of Bays		Σ	MVA/MVAR Capacity	AR Capi	acity	Date of	O ii a	Covered in the present petition
Name of Sub-station	Substation Level KV	Level	SVC etc. (with capacity)	765 KV	400 KV	220 KV	132 K	765 KV	400 KV	220 KV	₹32	Comm. operation	S × Ke	Ye If No, s/ Petitio No n No.
Shujalpur:ICT BAY	Brownfield 400 KV	400 KV			1.000							Jan 13, 2023 Y	>-	
Shujalpur:ICT BAY	Brownfield 220 KV	220 KV				1.000						Jan 13, 2023 Y	>-	
Shujalpur:ICT	Brownfield 400 KV	400 KV	1.000						500.00			Jan 13, 2023 Y	>	

99 Summary:

O&M Expenses For Substations Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
400KV SUB-STATION			-		
Normative Rate of O&M as per Regulation	00.00	00.00	00.0	35.66	36.91
No. of Units	00.00	00.00	00.00	1.00	1.00
O&M Claimed	00.00	00:00	00.00	7.62	36.91
220KV SUB-STATION					
Normative Rate of O&M as per Regulation	00.00	00.00	00.00	24.96	25.84
No. of Units	00.00	00.00	00.0	1.00	1.00
O&M Claimed	00.00	00.00	00.0	5.33	25.84

Page 2 of 5 0671001 : Truing Up: 1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)

400KV SUB-STATION ICT					
Normative Rate of O&M as per Regulation	00.00	0.00	00.00	0,398	0.411
No. of Units	00.00	00.00	00.00	1.00	1.00
O&M Claimed	00.00	00.00	00.00	42.53	205.50





Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M					
Transmission Line	00.00	00.00	00.00	00.00	0.00
Substation	00.00	00.00	00.00	55.48	268.25
Communication System	00.00	0.00	00.00	0.00	0.00
Total Normative O&M	00.00	00.00	00.00	55.48	268.25
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition )					
*Security Expenses	00.00	00.00	00.00	0.00	0.00
*Actual Capital Spare consumed	00.00	00.00	00:00	00.00	0.00
*Insurance Premium Paid	00:00	00.00	00:00	00.00	0.00
Total O&M	00:00	0.00	00:00	55.48	268.25

(Petitioner)



### Normative parameters considered for tariff computations

Name of the	Transmission Licensee	Power Grid Corpora	tion of India Limit	ed
Project	ICT Augmentation at 2x3	315 MVA 400/220 KV	Shujalpur (PG) S	Substation
Element Description	1X500 MVA, 400/220 kV	ICT augmentation al	ong with associa	ted bays Shujalpur (PG)
Region	Western Region		DOCO Date	Jan 13, 2023

(Amount in Rs. Lakh)

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

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0671001 : Truing Up: 1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shajalpur (PC)

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

(Petitioner)

# Statement of Capital cost

Name of the Tr	Name of the Transmission Licensee Power Grid (	Power Grid Corporation of India Limited				
Project	ICT Augmentation at 2x315 MVA 40	ICT Augmentation at 2x315 MVA 400/220 KV Shujalpur (PG) Substation				
Element Description	1X500 MVA, 400/220 kV ICT augme	1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)	(9)			
Region	Western Region	DOCO Date	Jan 13, 2023			
A) Capital Cost	<u></u>			(Amount in Rs. Lakh)	ר Rs. Lakh	
	Ра	Particular	Accrual Basis	sis Un-discharged	harged lities	Cash Basis
As on releva	As on relevant date :2022-23					
a) Opening G	a) Opening Gross Block Amount as per books		64(	640.14	171.48	468.66
Amount of	A) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	Iging cost included in A(a) above		1.19	00.00	1.19
c) Amount of	EDC (excluding IDC, FC, FERV &	c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	78	78.74	0.00	78.74
a) Addition in	a) Addition in Gross Block Amount during the period	eriod	100	109.13	0.00	109.13
b) Amount of	b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	aging cost included in B(a) above		0.00	0.00	00.00
c) Amount of	EDC (excluding IDC, FC, FERV &	c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above		0.00	00.00	0.00
d) De-cap in (	d) De-cap in gross block amount during the year	يا		0.00	00.00	0.00
a) Closing Gr	a) Closing Gross Block Amount as per books		748	749.27	171.48	577.79

a) Closing Gross block Amount as per books	17.641	171.48	9/1/8
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	1.19	00.00	1.19
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	78.74	00:00	78.74
00000			
As on relevant date :2023-24			
a Opening Gross Block Amount as per books	749.27	171.48	577 79

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(i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above

1.19

0.00

1.19

c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	78.74	00:00	78.74
a) Addition in Gross Block Amount during the period	2,041.49	00.00	2,041.49
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	00.00	00.00	00.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	00.00	00.00	00'0
d) De-cap in gross block amount during the year	00.00	00.00	00.00

a) Closing Gross Block Amount as per books	2,790.76	99.33	2,691.43
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	1.19	00.00	1.19
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	78.74	00.00	78.74

B) Flow of liability for the Asset

(Amount in Rs. Lakh)

Particular	2022-2023 2023-2024	2023-2024	2024-2025						
Opening balance of liability	171.48	171.48	99.33	0.00	00:00	0.00	00'0	0.00	0.00
Add: Liability from ACE	00.0	00.00	00:00	00:00	00:00	0.00	0.00	0.00	0.00
Discharge of liability by payment and claimed as ACE	00'0	72.15	99.33	00.00	00'0	0.00	0.00	0.00	0.00
Reversal/cancelation (to be entered)	00.00	00.00	00.00	00.00	0.00	0.00	0.00	0.00	00.00
Closing Balance of Admitted liability	171.48	99.33	00.00	0.00	0.00	0.00	0.00	0.00	00.0

(Petitioner)



## Financial Package upto COD

Name of the	Transmission Licensee	Power Grid Corporation	on of India Limited	
Project	ICT Augmentation at 2	x315 MVA 400/220 KV	Shujalpur (PG) Su	bstation
Element Description	1X500 MVA, 400/220 k	:V ICT augmentation al	ong with associated	d bays Shujalpur (PG)
Region	Western Region		DOCO Date	Jan 13, 2023

	Financial I	Package as oved	Financial F on COD 0	Package as 1/04/2019	As Admitte 01/04	ed on COD
Particulars	Currency	Amount	Currency	Amount	Currency	Amount
Loans		0.00		0.00		0.00
Loan-Domestic		0.00		0.00		0.00
Loan-Foreign		0.00		0.00		0.00
Total Loans	INR	2,298.065	INR	333.30		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	984.894	INR	135.36		0.00
Total Equity	INR	984.894	INR	135.36		0.00
		•	-	***	·	
Debt Equity Ratio					71:29	
Total Cost	INR	3,282.959	INR	468.66		0.00

Particulars	Debt	Equity	Total	
Addcap for 2022 - 2023			109.13	
Addcap for 2023 - 2024			2,113.64	

Particulars	Actual	Normative		6	1
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Addcap for 2022 - 2023		
Equity	32.74	
Debt	76.39	
Total	109.13	
Addcap for 2023 - 2024		
Equity	634.09	
Debt	1,479.55	
Total	2,113.64	
Total Capital cost with Addcap	2,691.43	

### Statement of Additional Capitalisation after COD

Name of the Tr	ansmission Licensee	Power Grid Corporat	ion of India Limited	
Project	ICT Augmentation at 2x3	315 MVA 400/220 KV	Shujalpur (PG) Sub	ostation
Element Description	1X500 MVA, 400/220 kV	/ ICT augmentation al	ong with associated	d bays Shujalpur (PG)
Region	Western Region	_	DOCO Date	Jan 13, 2023

Particulars	Addition into Gross Block as per books	De-Cap into Gross Block as per books	Grants	s: Deducti tow Asset	ons dr. vards	Less: Un-	Add: Discharge of earlier	ACE on cash basis for tariff	Admitte d Cost in final
	of Account during the year (2)	of Account during the year	Receiv ed (if any) (3)	pertaini ng to other busines s (If any) (4)	Dedu ct ion (if any) (5)	discharge d liability included in (2-4-5)	admitted liability	purpose	tariff (Rs Lakh)
ACE for the year :2019-20 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0,00	0.00	0.00	.0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2020-21 (Actual/Projected)								ORBITUA	

Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0,00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0,00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2021-22 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0,00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2022-23 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0671001 : Truing Up: 1X500 MVA, 400/220 kV ICT augmentation along with a sociated by Shujalpur

Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	109.13	0.00	0.00	0.00	0.00	0.00	0.00	109.13	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	109.13	0.00	0.00	0.00	0.00	0.00	0.00	109.13	0.00
ACE for the year :2023-24 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	2,016.07	0.00	0.00	0.00	0.00	0.00	69.32	2,085.39	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	25.42	0.00	0.00	0.00	0.00	0.00	2.83	28.25	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	2,041.49	0.00	0.00	0.00	0.00	0.00	72.15	2,113.64	0.00
									-

# Financing of Additional Capitalisation

Name of the Tra	Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	ICT Augmentation at 2x	ICT Augmentation at 2x315 MVA 400/220 KV Shujalpur (PG) Substation		
Element Description	1X500 MVA, 400/220 K	1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)	Shujalpur (PG)	
Region	Western Region		DOCO Date	Jan 13, 2023

(Amount in Rs. Lakh)

Financial Year ( Starting of COD)         2019-20         2020-21         2021-22         2022-23         2023-24         2019-20         2020-21         2021-22           Amount capitilized in Work/ Sequipment         Amount capitilized in Work/ Sequipment         Financing Details         Financing Details			d	Actual/Projected	cted				Admitted	itted	
0.00 0.00 0.00 76.39 1 0.00 0.00 0.00 32.74 0.00 0.00 0.00 109.13 2	Financial Year ( Starting of COD)	2019-20	2020-21	2021-22	2022-23	2023-24	2019-20	2020-21	2021-22	2022-23	2023-24
ing Details  oan  0.00  0.00  0.00  76.39  1  0.00  0.00  0.00  32.74	Amount capitilized in Work/										
oan 0.00 0.00 76.39 1 0.00 0.00 0.00 32.74 0.00 0.00 0.00 109.13 2	Financing Details										
oan     0.00     0.00     76.39     1       0.00     0.00     0.00     32.74       0.00     0.00     0.00     109.13     2											
0.00 0.00 32.74	Total Loan	0.00	0.00	00:00	76.39						
0.00 0.00 32.74 0.00 0.00 0.00 109.13 2											
0.00 0.00 0.00 109.13	Equity	00.00	00'0	00.00	32.74	634.09					
0.00 0.00 109.13	ORAT										
	1	00.0		00.00	109.13						

### **Calculation of ROE**

Name of the T	ransmission Licensee	Power Grid Corporation	on of India Limited	
Project	ICT Augmentation at 2	x315 MVA 400/220 KV	Shujalpur (PG) Sul	bstation
Element Description	1X500 MVA, 400/220 k	V ICT augmentation al	ong with associated	d bays Shujalpur (PG)
Region	Western Region		DOCO Date	Jan 13, 2023

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the year	0.00	0.00	0.00	365.00	366.00
No. of days for which tariff claimed	0.00	0.00	0.00	78.00	366.00
Opening Normative Equity	0.00	0.00	0.00	135.36	168.10
Less: Adjustment in Equity*	0.00	0.00	0.00	0.00	0.00
Adjustment during the year	0.00	0.00	0.00	0.00	0.00
Net opening equity (Normal)	0.00	0.00	0.00	135.36	168.10
Add: Increase in Equity due to addition during the year / period	0.00	0.00	0.00	32.74	612.45
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	21.64
Closing Normative Equity	0.00	0.00	0.00	168.10	802.19
Average Normative Equity	0.00	0.00	0.00	151.73	485.15
Rate of return on Equity (%)	0.00	0.00	0.00	18.782	18.782
Reduced rate of 1% decided by commission under Regulation 30(2) (if any)	0.00	0.00	0.00	0.00	0.00
Effective rate of ROE	0.00	0.00	0.00	15.50	15.50
MAT/Corporate Rate	0.00	0.00	0.00	17.472	17.472
Grossed up rate of ROE	0.00	0.00	0.00	18.782	18.782
Return on Equity	0.00	0.00	0.00	28.50	91.12
Pro rata return on Equity	0.00	0.00	0.00	6,09	TION 091.12

### Calculation of WAR of interest on actual loan

Name of the 1	Transmission Licensee	Power Grid Corporation of India Limited					
Project	Project ICT Augmentation at 2x315 MVA 400/220 KV Shujalpur (PG) Substation						
Element Description	1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)						
Region	Western Region	DOCO Date Jan 13, 2023					

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
SBI-04 -ADD CAP 2022-23					
Gross Loan- Opening	0.00	0.00	0.00	0.00	71.84
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	6.78	6.78
Net loan-Opening	0.00	0.00	0.00	0.00	65.06
Add: Drawl(s) during the year	0.00	0.00	0.00	71.84	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	7.18
Net Loan-Closing	0.00	0.00	0.00	71.84	57.88
Average Net Loan	0.00	0.00	0.00	35.92	61.47
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.85641	8.126549
Interest on loan	0.00	0.00	0.00	2.822	4.9954

SBI-04 -ADD CAP 2023-24					
Gross Loan- Opening	0.00	0.00	0.00	0.00	0.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	101.90
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	1,079.40
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	107.94
Net Loan-Closing	0.00	0.00	0.00	30.00	971.46

Average Net Loan	0.00	0.00	0.00	0.00	485.73
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.85641	8.126549
Interest on loan	0.00	0.00	0.00	0.00	39.4731

SBI-04 -DOCO					
Gross Loan- Opening	0.00	0.00	0.00	295.07	295.07
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	27.85	27.85
Net loan-Opening	0.00	0.00	0.00	267.22	267.22
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	29.51
Net Loan-Closing	0.00	0.00	0.00	267.22	237.71
Average Net Loan	0.00	0.00	0.00	267.22	252.47
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.85641	8.126549
Interest on loan	0.00	0.00	0.00	20.9939	20.5171

SBI-04 -DOCO					
Gross Loan- Opening	0.00	0.00	0.00	38.23	38.23
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	3.61	3.61
Net loan-Opening	0.00	0.00	0.00	34.62	34.62
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	3.82
Net Loan-Closing	0.00	0.00	0.00	34.62	30.80
Average Net Loan	0.00	0.00	0.00	34.62	32.71
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.85641	8.126549
Interest on loan	0.00	0.00	0.00	2,7199	2,6582

HDFC (Rs.5000 Cr.) -ADD CAP 2022-23					
Gross Loan- Opening	0.00	0.00	0.00	0.00	4.30
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	2.17	2.17
Net loan-Opening	0.00	0.00	0.00	0.00	2.13
Add: Drawl(s) during the year	0.00	0.00	0.00	4.30	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	4.30	2.13
Average Net Loan	0.00	0.00	0.00	2.15	2.13
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	8.000641	8.10
Interest on loan	0.00	0.00	0.00	0.172	0.1725

Canara-01 -ADD CAP 2023-24					
Gross Loan- Opening	0.00	0.00	0.00	0.00	0.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	343.13
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	34.31
Net Loan-Closing	0.00	0.00	0.00	0.00	308.82
Average Net Loan	0.00	0.00	0.00	0.00	154.41
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	8.063462	8.15
Interest on loan	0.00	0.00	0.00	0.00	12.5844

BOND LXX (70) -ADD CAP 2022-23					
Gross Loan- Opening	0.00	0.00	0.00	0.00	0.25
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	0.00	0.00	0.00	110NOR 0.25

Add: Drawl(s) during the year	0.00	0.00	0.00	0.25	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.03
Net Loan-Closing	0.00	0.00	0.00	0.25	0.22
Average Net Loan	0.00	0.00	0.00	0.13	0.24
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.40	7.40
Interest on loan	0.00	0.00	0.00	0.0096	0.0178

BOND LXXII (72) -ADD CAP 2023-24					
Gross Loan- Opening	0.00	0.00	0.00	0.00	0.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	32.80
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	2.46
Net Loan-Closing	0.00	0.00	0.00	0.00	30.34
Average Net Loan	0.00	0.00	0.00	0.00	15.17
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.56	7.56
Interest on loan	0.00	0.00	0.00	0.00	1.1469

Bond LXXIV (74) -ADD CAP 2023-24					
Gross Loan- Opening	0.00	0.00	0.00	0.00	0.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.22
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.22
Average Net Loan	0.00	0.00	0.00	0.00	0.11

Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.70	7.70
Interest on loan	0.00	0.00	0.00	0.00	0.0085

Bond LXXV (75) -ADD CAP 2023-24					
Gross Loan- Opening	0.00	0.00	0.00	0.00	0.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	24.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	24.00
Average Net Loan	0.00	0.00	0.00	0.00	12.00
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.65	7.65
Interest on loan	0.00	0.00	0.00	0.00	0.918

### Summary

Gross Loan- Opening	0.00	0.00	0.00	333.30	409.69
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	40.41	142.31
Net loan-Opening	0.00	0.00	0.00	301.84	369.28
Add: Drawl(s) during the year	0.00	0.00	0.00	76.39	1,479.55
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	185.25
Net Loan-Closing	0.00	0.00	0.00	378,23	1,663.58
Average Net Loan	0.00	0.00	0.00	340.04	1,016.44
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	7.8571	8.1158
Interest on loan	0.00	0.00	0.00	26.7174	82,4919

### **Calculation of interest on Normative loan**

Name of the	Transmission Licensee	Power Grid Corporati	ower Grid Corporation of India Limited				
Project	ICT Augmentation at 2x	315 MVA 400/220 KV	Shujalpur (PG) Sul	bstation			
Element Description	1X500 MVA, 400/220 k	1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)					
Region	Western Region		DOCO Date	Jan 13, 2023			

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the Year	0.00	0.00	0.00	365.00	366.00
No. of days for which Tariff claimed	0.00	0.00	0.00	78.00	366.00
Gross normative loan-Opening	0.00	0.00	0.00	333.30	409.69
Cumulative repayments of Normative loan upto previous year	0.00	0.00	0.00	0.00	5.90
Net normative loan-Opening	0.00	0.00	0.00	333.30	403.79
Addition in normative loan towards the ACE	0.00	0.00	0.00	76.39	1,479.55
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	0.00	0.00	0.00	5.90	87.68
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	0.00	0.00	0.00	403.79	1,795.66
Average normative loan	0.00	0.00	0.00	368.55	1,099.73
Weighted Average Rate of interest on actual loan	0.00	0.00	0.00	7.8571	8.1158
Interest on normative loan	0.00	0.00	0.00	28.96	89.25
Pro rata interest on normative loan	0.00	0.00	0.00	6.19	89.25

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

Form No. - 10

Name of the T	ransmission Licensee	Power Grid Corpora	tion of India Limited	i			
Project	t ICT Augmentation at 2x315 MVA 400/220 KV Shujalpur (PG) Substation						
Element Description	1X500 MVA, 400/220 kV	1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)					
Region	Western Region		DOCO Date Jan 13, 2023				

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2024
2022-23						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	468.66	109.13	577.79	523.23	5.28	5.90
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	6.33	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	468.66	109.13	577.79	523.23	0.00	5.90
Weighted Average Rate of Depreciation(%)					1.127611	

2023-24					
Land(Freehold)	0.00	0.00	0.00	0.00	0.00

Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	577.79	2,085.39	2,663.18	1,620.49	5.28	85.56
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	6.33	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	28.25	28.25	14.13	15.00	2.12
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	577.79	2,113.64	2,691.43	1,634.62	0.00	87.68
Weighted Average Rate of Depreciation(%)					5.363938	



### **Statement of Depreciation**

Name of the	Fransmission Licensee	Power Grid Corporation of India Limited				
Project	ICT Augmentation at 2x	5 MVA 400/220 KV Shujalpur (PG) Substation				
Element Description	1X500 MVA, 400/220 k	ICT augmentation along with associated bays Shujalpur (PG)				
Region	Western Region DOCO Date Jan 13, 2023					

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	0.00	0.00	0.00	365.00	366.00
No of days for which tariff claimed	0.00	0.00	0.00	78.00	366.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/ Project	0.00	0.00	0.00	25.00	25.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	0.00	0.00	0.00	0.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	0.00	0.00	25.00	25.00
Capital Base					
1.4 Opening capital cost	0.00	0.00	0.00	468.66	577.79
1.5 Additional Capital Expenditure dr. the year	0.00	0.00	0.00	109.13	2,113.64
1.6 De-Capitalisation During the year	0.00	0.00	0.00	0.00	0.00
1.7 Closing capital cost	0.00	0.00	0.00	577.79	2,691.43
1.8 Average capital cost	0.00	0.00	0.00	523.23	1,634.62
1.9 Freehold land included in 1.8	0.00	0.00	0.00	0.00	0.00
1.10 Asset having NIL salvage value included in 1.8	0.00	0.00	0.00	0.00	14.13
1.11 Asset having 10% salvage value included in 1.8	0.00	0.00	0.00	523.23	1,620.49
1.12 Depreciable Value(1.10+90% of 1.11)	0.00	0.00	0.00	470.91	1,472.57
Depreciation for the period and Cum. Depreciation	608/15				
1.13 Weighted Average Rate of depreciation	0.00	0.00	0.00	1.127611	5,363938

1.14 Depreciation(for the period)	0.00	0.00	0.00	5.90	87.68
1.15 Depreciation(Annualised)	0.00	0.00	0.00	5.90	87.68
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	0.00	0.00	0.00	0.00	5.90
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	0.00	0.00	0.00	5.90	93.58



Name of the T	ransmission Licensee	Power Grid Corpora	tion of India Limited	d
Project	ICT Augmentation at 2x3	15 MVA 400/220 KV	Shujalpur (PG) Sul	bstation
Element Description	1X500 MVA, 400/220 kV	ICT augmentation al	ong with associated	d bays Shujalpur (PG)
Region	Western Region		DOCO Date	Jan 13, 2023

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	0.00	0.00	0.00	365.00	366.00
No of days for which tariff claimed	0.00	0.00	0.00	78.00	366.00
O&M Expenses-one month	0.00	0.00	0.00	21.64	22.35
Maintenance spares 15% of O&M Expenses	0.00	0.00	0.00	38.94	40.24
Receivables equivalent to 45 days of AFC	0.00	0.00	0.00	43.85	67.86
Total Working capital	0.00	0.00	0.00	104.43	130.45
Bank Rate as on 01.04.2019 or as on 01st April of the COD year,whichever is later.	0.00	0.00	0.00	10.50	12.00
Interest on working capital	0.00	0.00	0.00	10.97	15.65
Pro rata interest on working capital	0.00	0.00	0.00	2.34	15.65

### **Summary of Tariff**

Form No. - 1

Name of the Tr	ransmission Licensee:	Power Grid Corporation	on of India Limited	
Project	ICT Augmentation at 2x	315 MVA 400/220 KV	Shujalpur (PG) Sub	ostation
Element Description	1X500 MVA, 400/220 k	V ICT augmentation al	ong with associated	d bays Shujalpur (PG)
Region	Western Region		DOCO Date	Jan 13, 2023

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Year Days	365.00	365.00	365.00	366.00	365.00
Tariff Days	365.00	365.00	365.00	366.00	365.00
Depreciation-Form No. 10A	149.75	154.65	154.65	154.65	154.65
Interest on Loan-Form No. 9E	146.08	139.15	126.50	113.86	101.21
Return on Equity-Form No. 8	156.10	161.53	161.53	161.53	161.53
Int. on Working capital-Form No.11	14.53	15.00	15.23	15,47	15.80
Op. and maintenance-Form No.2	181.20	190.83	200.61	211.03	222.59
Total AFC	647.66	661.16	658.52	656.54	655.78

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

Name of the Ti	Name of the Transmission Licensee Power	Power Grid Corporation of India Limited		
Project	ICT Augmentation at 2x315 M	ICT Augmentation at 2x315 MVA 400/220 KV Shujalpur (PG) Substation	tion	
Element Description	1X500 MVA, 400/220 kV ICT	1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)	ys Shujalpur (PG)	
Region	Western Region		DOCO Date	Jan 13, 2023

1. Transmission Lines

(Amount in Rs. Lakh)

Summary:

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0671001 : 1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)

2. Sub Station

	Type of Voltage	Voltage	No. of Transfor ms/		No. o	No. of Bays		Σ	MVA/MVAR Capacity	AR Cap	acity	Date of	o i pre	Covered in the present petition
Name of Sub-station	Substation Level	TO STORY	Reactor/ SVC etc. (with capacity)	765 KV	\$ \$ \$	220 KV	¥ 52 × 52 × 52 × 52 × 52 × 52 × 52 × 52	765 KV	400 K	220 KV	132 KV	Comm. operation	No K	Ye If No, s/ Petitio No n No.
Shujalpur:ICT BAY	Brownfield 400 KV	400 KV			1.000							Jan 13, 2023 Y	>	
Shujalpur:ICT BAY	Brownfield 220 KV	220 KV				1.000						Jan 13, 2023 Y	>	
Shujalpur:ICT	Brownfield 400 KV	400 KV	1.000						500.00			Jan 13, 2023 Y	>	

G Summary:

29.53 31.08	32.71	34.43	36.23
1.00	1.00	1.00	1.00
29.53 31.08	32.71	34.43	36.23
20.67 21.75			25.36
1.00			1.00
20.67 21.75			25.36
2 0 2	31.06		32.71 22.90 1.00

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0671001:1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)

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

400KV SUB-STATION ICT





Particular	2024-25	2025-26	2026-27	2027-28	2028-29
A) Normative O&M					
Transmission Line	00.00	00.00	00.00	00.00	00.00
Substation	181.20	190.83	200.61	211.03	222.59
Communication System	00.00	00.00	00.00	00.00	00:00
Total Normative O&M	181.20	190.83	200.61	211.03	222.59
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition )					
*Security Expenses	00.00	00.00	00.00	00.00	00.00
*Actual Capital Spare consumed	00.00	00.00	00.00	00.00	00.0
*Insurance Premium Paid	00.00	00.00	0.00	00.0	0.00
Total O&M	181.20	190.83	200.61	211.03	222.59



### Normative parameters considered for tariff computations

Name of the	Fransmission Licensee	Power Grid Corpora	tion of India Limit	red
Project	ICT Augmentation at 2x3	315 MVA 400/220 KV	Shujalpur (PG) S	Substation
Element Description	1X500 MVA, 400/220 kV	ICT augmentation al	long with associa	ted bays Shujalpur (PG)
Region	Western Region		DOCO Date	Jan 13, 2023

(Amount in Rs. Lakh)

Particulars	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Base Rate of Return of Equity (in %)						
Tax Rate (in %)	17.472	17.472	17.472	17.472	17.472	17.472
Effective tax rate (in %)						
Grossed up Rate for ROE of 15.5% (in %)	18.782	18.782	18.782	18.782	18.782	18.782
Grossed up Rate for ROE of 15.0% (in %)	18.176	18.176	18.176	18.176	18.176	18.176
Target availability - AC System (in %)	98.00	98.00	98.00	98.00	98.00	98.00
Target availability - HVDC System (in %)	96.00	96.00	96.00	96.00	96.00	96.00
Norms for sub-station Bays (Rs Lakh per bay)						
765 kV	51.68	41.34	43.51	45.79	48.20	50.73
400 kV	36.91	29.53	31.08	32.71	34.43	36.23
220 kV	25.84	20.67	21.75	22.90	24.10	25.36
132 kV and below	18.46	15.78	16.61	17.48	18.40	19.35
Norms for Transformers (Rs Lakh per MVA)				·		
765 kV	0.564	0.262	0.276	0.29	0.305	0.322
400 kV	0.411	0.262	0.276	0.29	0.305	0.322
220 kV	0.282	0.262	0.276	0.29	0.305	0.322
132 kV and below	0.282	0.262	0.276	0.29	0.305	0.322
Norms for Reactor (Rs Lakh per MVAR)						
765 kV	0.00	0.262	0.276	0.29	0,305	0.322
400 kV	0.00	0.262	0.276	0.29	0.305	0.322
	Page 1 of 2	96			O PON	A

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0671001 : 1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)

220 kV	0.00	0.262	0.276	0.29	0.305	0.322
132 kV and below	0.00	0.262	0.276	0.29	0.305	0.322
Norms for AC and HVDC lines (Rs Lakh per km)						
Single Circuit (Bundled Conductor with six or more sub-conductors)	1.011	0.861	0.906	0.953	1.003	1.056
Single Circuit (Bundled conductor with four subconductors)	0.867	0.738	0.776	0.817	0.86	0.905
Single Circuit (Twin & Triple Conductor)	0.578	0.492	0.518	0.545	0.573	0.603
Single Circuit (Single Conductor)	0.289	0.246	0.259	0.272	0.287	0.302
Double Circuit (Bundled conductor with four or more sub-conductors)	1.517	1.291	1.359	1.43	1.506	1.585
Double Circuit (Twin & Triple Conductor)	1.011	0.861	0.906	0.953	1.003	1.056
Double Circuit (Single Conductor)	0.433	0.369	0.388	0.409	0.43	0.453
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.662	2.266	2.385	2.51	2.642	2.781
Multi Circuit (Twin & Triple Conductor)	1.773	1.509	1.588	1.671	1.759	1,851
Norms for HVDC stations (Rs Lakh/MW)	,					
HVDC bipole scheme (Rs Lakh/MW)	0.00	1.04	1.10	1.16	1.22	1.28
HVDC Back-to-Back stations (Rs Lakh/MW) (Except Gazuwaka BTB)	0.00	2.07	2.18	2.30	2.42	2.55
Gazuwaka HVDC Back-to-Back station (Rs Lakh/ MW)	0.00	1.83	1.92	2.03	2.13	2.24



Project	ICT Augmentation at 2x315 MVA 400/220 KV Shujalpur (PG) Substation			
Element Description	1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)			
Region	Western Region DOCO Date	Jan 13, 2023		
A) Capital Cost	ost		(Amount in Rs. Lakh)	(u
	Particular	Accrual Basis	Un-discharged Liabilities	Cash Basis
As on relev	As on relevant date :2024-25			
a) Opening	Opening Gross Block Amount as per books	2,790.76	99.33	2,691.43
Amount o	Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	1.19	00.00	1.19
c) Amount o	Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	78.74	00.00	78.74
a) Addition i	a) Addition in Gross Block Amount during the period	93.54	00.00	93.54
b) Amount o	b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	00.00	00.0	0.00
c) Amount o	Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	00.00	00.00	0.00
d) De-cap in	d) De-cap in gross block amount during the year	00.00	00:00	0.00
a) Closing G	a) Closing Gross Block Amount as per books	2 884 30	00 0	2 884 30
b) Amount o	b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	1.19	0.00	1.19
c) Amount o	c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	78.74	00.0	78.74
OR OR				
As on relev	As on relevant date :2025-26			
a) Opening	a) Opening Gross Block Amount as per books	2,884.30	00.00	2,884.30
b) Amount o	b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	1.19	00.00	1.19

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if 4 0671001 : 1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)

c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	78.74	0.00	78.74
a) Addition in Gross Block Amount during the period	00.00	0.00	00.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	00.00	0.00	00.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	00.00	0.00	00.00
d) De-cap in gross block amount during the year	00:00	0.00	00.00
a) Closing Gross Block Amount as per books	2,884.30	00.00	2,884.30
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	1.19	00.00	1.19
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	78.74	0.00	78.74
As on relevant date :2026-27			
a) Opening Gross Block Amount as per books	2,884.30	00.00	2,884.30
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	1.19	0.00	1.19
(excluding IDC, FC, FERV & Hedging cost) included in A(a) above	78.74	0.00	78.74
9			
a) Addition in Gross Block Amount during the period	00.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	00.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	00.00	0.00	0.00
d) De-cap in gross block amount during the year	00.00	0.00	00.00
a) Closing Gross Block Amount as per books	2,884.30	00.00	2,884.30
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	1.19	00'0	1.19
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	78.74	00.00	78.74
As on relevant date :2027-28			

1.19 78.74

1.19 78.74

0.00 0.00

2,884.30

0.00

2,884.30

c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above

b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above

a) Opening Gross Block Amount as per books

a) Addition in Gross Block Amount during the period	unt during the period					00.0	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost incl	FRV & (iv) Hedging cost	included in B(a) above	above			00.0	00.00	00.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	C, FC, FERV & Hedging	cost) included i	n B(a) above			00.00	0.00	0.00
d) De-cap in gross block amount during the year	t during the year					00.00	0.00	00.00
a) Closing Gross Block Amount as per books	as per books				2,86	2,884.30	0.00	2,884.30
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	FRV & (iv) Hedging cost	included in C(a)	) above			1.19	00.00	1.19
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	C, FC, FERV & Hedging	cost)included in	ι C(a) above		7	78.74	00.00	78.74
As on relevant date :2028-29								
a) Opening Gross Block Amount as per books	t as per books				2,86	2,884.30	0.00	2,884.30
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost incl	FERV & (iv) Hedging cost	included in A(a) above	) above			1.19	00.00	1.19
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	OC, FC, FERV & Hedging	cost) included i	n A(a) above		2	78.74	0.00	78.74
10								
Addition in Gross Block Amount during the period	unt during the period					00.00	00.00	00.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	FRV & (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	OC, FC, FERV & Hedging	cost) included i	n B(a) above			00.00	0.00	00.00
d) De-cap in gross block amount during the year	t during the year					00.0	0.00	00.00
a) Closing Gross Block Amount as per books	as per books				2,86	2,884.30	0.00	2.884.30
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost incl	FRV & (iv) Hedging cost	included in C(a) above	) above			1.19	0.00	1.19
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	OC, FC, FERV & Hedging	cost)included ir	າ C(a) above		1	78.74	0.00	78.74
B) Flow of liability for the Asset						(Amoun	(Amount in Rs. Lakh)	
Particular	2024-2025							
Opening balance of liability	99.33 0.00	00.00	0.00	00.00	0.00	0.00	0.00	00.00
Add: Liability from ACE	00.0	0.00	00.00	00.00	0.00	0.00	0.00	00.00
		à	Page 3 of 4 on	0671001 : 1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujaipur (PG)	kV ICT augmentation along	with associated bays Shujalr	ur (PG)	

Discharge of liability by payment and claimed as ACE	99.33	00.00	00.00	00.00	00.00	0.00	0.00	0.00	0.00
Reversal/cancelation (to be entered)	00.00	00.00	00.00	0.00	00.00	00.00	00'0	00.00	00.0
Closing Balance of Admitted liability	00.0	00.00	00.00	00.00	00.00	0.00	00.00	00.00	0.00



### Financial Package upto COD

Name of the Tra	ansmission Licensee	Power Grid Corporatio	n of India Limited	
Project	ICT Augmentation at 23	x315 MVA 400/220 KV	Shujalpur (PG) Sul	bstation
Element Description	1X500 MVA, 400/220 k	V ICT augmentation al	ong with associated	d bays Shujalpur (PG)
Region	Western Region		DOCO Date	Jan 13, 2023

(Amount in Rs. Lakh)

	Financial F Appro	Package as oved	Financial F on COD 0	Package as 1/04/2024	As Admitte	ed on COD
Particulars	Currency	Amount	Currency	Amount	Currency	Amount
Loans		0.00		0.00		0.00
Loan-Domestic		0.00		0.00		0.00
Loan-Foreign		0.00		0.00		0.00
Total Loans	INR	2,298.065	INR	1,889.24		0.00
					1	
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	984.894	INR	802.19		0.00
Total Equity	INR	984.894	INR	802.19		0.00
	718			'		
Debt Equity Ratio					70:30	
Total Cost	INR	3,282.959	INR	2,691.43		0.00

Particulars	Debt	Equity	Total	
Addcap for 2024 - 2025			192.87	
Addcap for 2025 - 2026			0.00	
Addcap for 2026 - 2027			0.00	
Addcap for 2027 - 2028		102	0.00	

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0671001: 1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shulal

Addcap for 2028 - 2029	0.00	
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Particulars	Actual	Normative	
Addcap for 2024 - 2025			
Equity		57.86	
Debt		135.01	
Total		192.87	
Addcap for 2025 - 2026			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2026 - 2027			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2027 - 2028			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2028 - 2029			
Equity		0.00	
Debt		0.00	
Total		0.00	ORATION OF
Total Capital cost with Addcap		2,884.30	S S S S S S S S S S S S S S S S S S S

### Form No. - 7

## Statement of Additional Capitalisation after COD

Name of the Tra	ansmission Licensee	Power Grid Corporat	ion of India Limited	
Project	ICT Augmentation at 2x3	15 MVA 400/220 KV	Shujalpur (PG) Su	bstation
Element Description	1X500 MVA, 400/220 kV	ICT augmentation al	ong with associated	d bays Shujalpur (PG)
Region	Western Region		DOCO Date	Jan 13, 2023

	Addition into Gross Block as	De-Cap into Gross Block as	Less	: Deducti	ons dr. ⁄ards	the year	Add: Discharge of	ACE on cash basis	Admitte d Cost in
Particulars	per books of Account during the year (2)	per books of Account during the year		Asset pertaini ng to other busines s (If any) (4)	Other Dedu ct ion (if any) (5)	Less: Un- discharge d liability included in (2-4-5)	earlier admitted liability	for tariff purpose	final tariff (Rs Lakh)
ACE for the year :2024-25 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	20.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	73.54	0.00	0.00	0.00	0.00	0.00	99.33	172.87	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	93.54	0.00	0.00	0.00	0.00	0.00	99.33	192.87	0.00
ACE for the year :2025-26 (Actual/Projected)								SORATION O	

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0,00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00         0.00       0.00	0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00	0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00	0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00         0.00           0.00         0.00         0.00         0.00	0.00         0.00 <td< td=""><td>0.00         <td< td=""><td>0.00         <td< td=""></td<></td></td<></td></td<>	0.00         0.00 <td< td=""><td>0.00         <td< td=""></td<></td></td<>	0.00         0.00 <td< td=""></td<>

0671001 : 1X500 MVA, 400/220 kV ICT augmentation along with associated by a Shujalpur (FS)

Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2028-29 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0,00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	ORATIO0.00	0.00

# Financing of Additional Capitalisation

Name of the Tra	Name of the Transmission Licensee	Dower Grid Cornoration of India Limited		
)				
Project	ICT Augmentation at 2x	ICT Augmentation at 2x315 MVA 400/220 KV Shujalpur (PG) Substation	_	
Element Description	1X500 MVA, 400/220 k	1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)	Shujalpur (PG)	
Region	Western Region		DOCO Date	Jan 13, 2023

(Amount in Rs. Lakh)

		A	Actual/Projected	ected				Admitted	itted	
Financial Year ( Starting of COD)	2024-25	2025-26	2026-27	2027-28	2028-29	2024-25	2025-26	2026-27	2027-28	2028-29
Amount capitilized in Work/ Equipment										
Financing Details										
								*		
Total Loan	135.01	00.00	00.00	00.00	0.00					
Equity	57.86	00.00	00.00	00.00	00.00					
SUD CORPOS										
Total	192.87	00.00	00.00	00.0	00.00					
										1 des

### **Calculation of ROE**

Name of the	Transmission Licensee	Power Grid Corporation of India Limited
Project	ICT Augmentation at 2)	315 MVA 400/220 KV Shujalpur (PG) Substation
Element Description	1X500 MVA, 400/220 k	VICT augmentation along with associated bays Shujalpur (PG)
Region	Western Region	DOCO Date Jan 13, 2023

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the year	365.00	365.00	365.00	366.00	365.00
No. of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
Opening Normative Equity	802.19	860.05	860.05	860.05	860.05
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)	802.19	860.05	860.05	860.05	860.05
Add: Increase in Equity due to addition during the year / period	28.06	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	29.80	0.00	0.00	0.00	0.00
Closing Normative Equity	860.05	860.05	860.05	860.05	860.05
Average Normative Equity	831.12	860.05	860.05	860.05	860.05
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	156.10	161.53	161.53	161.53	161.53
Pro rata return on Equity	156.10	161.53	161.53	161.53	161.53

### Calculation of WAR of interest on actual loan

Name of the Tra	ansmission Licensee	Power Grid Corporation	on of India Limited				
Project ICT Augmentation at 2x315 MVA 400/220 KV Shujalpur (PG) Substation							
Element Description	1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)						
Region	Western Region		DOCO Date	Jan 13, 2023			

(Amount in Rs. Lakh)

			(Amount in 13, Lakir)			
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29	
SBI-04 -ADD CAP 2022-23						
Gross Loan- Opening	71.84	71.84	71.84	71.84	71.84	
Cumulative repayments of Loans upto previous year	13.97	21.15	28.33	35.52	42.70	
Net loan-Opening	57.87	50.69	43.51	36.32	29.14	
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00	
Less: Repayment(s) of loan during the year	7.18	7.18	7.18	7.18	7.18	
Net Loan-Closing	50.69	43.51	36.33	29.14	21.96	
Average Net Loan	54.28	47.10	39.92	32.73	25.55	
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20	
Interest on loan	4.451	3.8622	3.2734	2.6839	2.0951	

SBI-04 -ADD CAP 2023-24					
Gross Loan- Opening	1,079.40	1,079.40	1,079.40	1,079.40	1,079.40
Cumulative repayments of Loans upto previous year	209.84	317.78	425.72	533.66	641.60
Net loan-Opening	869.56	761.62	653.68	545.74	437.80
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	107.94	107.94	107.94	107.94	107.94
Net Loan-Closing	761.62	653.68	545.74	437.80	329.86

Average Net Loan	815.59	707.65	599.71	491.77	383.83
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	66.8784	58.0273	49.1762	40.3251	31.4741

SBI-04 -DOCO	.4				
Gross Loan- Opening	295.07	295.07	295.07	295.07	295.07
Cumulative repayments of Loans upto previous year	57.36	86.87	116.38	145.88	175.39
Net loan-Opening	237.71	208,20	178.69	149.19	119.68
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	29.51	29.51	29.51	29.51	29.51
Net Loan-Closing	208.20	178.69	149.18	119.68	90.17
Average Net Loan	222.96	193.45	163.94	134.44	104.93
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	18.2827	15.8629	13.4431	11.0241	8.6043

SBI-04 -DOCO					
Gross Loan- Opening	38.23	38.23	38.23	38.23	38.23
Cumulative repayments of Loans upto previous year	7.43	11.25	15.08	18.90	22.72
Net loan-Opening	30.80	26.98	23.15	19.33	15.51
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	3.82	3.82	3.82	3.82	3.82
Net Loan-Closing	26.98	23.16	19.33	15.51	11.69
Average Net Loan	28.89	25.07	21.24	17.42	13.60
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	2.369	2.0557	1.7417	1.4284	1.1152

HDFC (Rs.5000 Cr.) -ADD CAP 2022-23					
Gross Loan- Opening	4.30	4.30	4.30	4.30	4.30
Cumulative repayments of Loans upto previous year	2.17	2.17	2.17	2.39	2.60
Net loan-Opening	2.13	2.13	2.13	1.91	1.70
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	0.21	0.21	0.21
Net Loan-Closing	2.13	2.13	1.92	1.70	1.49
Average Net Loan	2.13	2.13	2.03	1.81	1.60
Rate of Interest on Loan on Annual Basis	8.10	8.10	8.10	8.10	8.10
Interest on loan	0.1725	0.1725	0.1644	0.1466	0.1296

Canara-01 -ADD CAP 2023-24					
Gross Loan- Opening	343.13	343.13	343.13	343.13	343.13
Cumulative repayments of Loans upto previous year	34.31	51.47	85.78	120.10	154.41
Net loan-Opening	308.82	291.66	257.35	223.03	188.72
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	17.16	34.31	34.31	34.31	34.31
Net Loan-Closing	291.66	257.35	223.04	188.72	154.41
Average Net Loan	300.24	274.51	240.20	205.88	171.57
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	24.4696	22.3726	19.5763	16.7792	13.983

BOND LXX (70) -ADD CAP 2022-23					
Gross Loan- Opening	0.25	0.25	0.25	0.25	0.25
Cumulative repayments of Loans upto previous year	0.03	0.05	0.08	0.10	0.13
Net loan-Opening	0.22	0.20	0.17	0.15	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	0.03	0.03	0.03	0.03	0.03
Net Loan-Closing	0.19	0.17	0.14	0.12	0.09
Average Net Loan	0.21	0.19	0.16	0.14	0.11
Rate of Interest on Loan on Annual Basis	7.40	7.40	7.40	7.40	7.40
Interest on loan	0.0155	0.0141	0.0118	0.0104	0.0081

BOND LXXII (72) -ADD CAP 2023-24					
Gross Loan- Opening	32.80	32.80	32.80	32.80	32.80
Cumulative repayments of Loans upto previous year	2.46	5.74	9.02	12.30	15.58
Net loan-Opening	30.34	27.06	23.78	20.50	17.22
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	3.28	3.28	3.28	3.28	3.28
Net Loan-Closing	27.06	23.78	20.50	17.22	13.94
Average Net Loan	28.70	25.42	22.14	18.86	15.58
Rate of Interest on Loan on Annual Basis	7.56	7.56	7.56	7.56	7.56
Interest on loan	2.1697	1.9218	1.6738	1.4258	1.1778

Bond LXXIV (74) -ADD CAP 2023-24			•		
Gross Loan- Opening	0.22	0.22	0.22	0.22	0.22
Cumulative repayments of Loans upto previous year	0.00	0.02	0.04	0.07	0.09
Net loan-Opening	0.22	0.20	0.18	0.15	0.13
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.02	0.02	0.02	0.02	0.02
Net Loan-Closing	0.20	0.18	0.16	0.13	ATION CO.11
Average Net Loan	0.21	0.19	0.17	0.14	0.12

Rate of Interest on Loan on Annual Basis	7.70	7.70	7.70	7.70	7.70
Interest on loan	0.0162	0.0146	0.0131	0.0108	0.0092

Bond LXXV (75) -ADD CAP 2023-24					
Gross Loan- Opening	24.00	24.00	24.00	24.00	24.00
Cumulative repayments of Loans upto previous year	0.00	2.40	4.80	7.20	9.60
Net loan-Opening	24.00	21.60	19.20	16.80	14.40
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	2.40	2.40	2.40	2.40	2.40
Net Loan-Closing	21.60	19.20	16.80	14.40	12.00
Average Net Loan	22.80	20.40	18.00	15.60	13.20
Rate of Interest on Loan on Annual Basis	7.65	7.65	7.65	7.65	7.65
Interest on loan	1.7442	1.5606	1.377	1.1934	1.0098

# Summary

Gross Loan- Opening	1,889.24	1,889.24	1,889.24	1,889.24	1,889.24
Cumulative repayments of Loans upto previous year	327.57	498.90	687.40	876.12	1,064.82
Net loan-Opening	1,561.67	1,390.34	1,201.84	1,013.12	824.42
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	171.34	188.49	188.70	188.70	188.70
Net Loan-Closing	1,390.33	1,201.85	1,013.14	824.42	635.72
Average Net Loan	1,476.01	1,296.11	1,107.51	918.79	730.09
Rate of Interest on Loan on Annual Basis	8.1686	8.1678	8.167	8.1659	8.1642
Interest on loan	120.5688	105.8643	90.4508	75.0277	ON 59.6062

### Calculation of interest on Normative loan

Name of the 1	Fransmission Licensee	Power Grid Corporati	on of India Limited				
Project ICT Augmentation at 2x315 MVA 400/220 KV Shujalpur (PG) Substation							
Element Description	11 Y 500 M/VA 400/2/20 KV 101 alignmentation along with accordated have Shullainur (PCs)						
Region	Western Region	DOCO Date Jan 13, 2023					

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the Year	365.00	365.00	365.00	366.00	365.00
No. of days for which Tariff claimed	365.00	365.00	365.00	366.00	365.00
Gross normative loan-Opening	1,889.24	2,024.25	2,024.25	2,024.25	2,024.25
Cumulative repayments of Normative loan upto previous year	93.58	243.33	397.98	552.63	707.28
Net normative loan-Opening	1,795.66	1,780.92	1,626.27	1,471.62	1,316.97
Addition in normative loan towards the ACE	135.01	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	149.75	154.65	154.65	154.65	154.65
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	1,780.92	1,626.27	1,471.62	1,316.97	1,162.32
Average normative loan	1,788.29	1,703.60	1,548.95	1,394.30	1,239.65
Weighted Average Rate of interest on actual loan	8.1686	8.1678	8.167	8.1659	8.1642
Interest on normative loan	146.08	139.15	126.50	113.86	101.21
Pro rata interest on normative loan	146.08	139.15	126.50	113.86	101.21

#### Form No. - 10

# Calculation of Depreciation Rate on Original Project Cost

Name of the	Fransmission Licensee	Power Grid Corpora	ition of India Limited	d		
Project ICT Augmentation at 2x315 MVA 400/220 KV Shujalpur (PG) Substation						
Element Description  1X500 MVA, 400/220 kV ICT augmentation along with associated bays Shujalpur (PG)						
Region	Western Region		DOCO Date	Jan 13, 2023		

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2029
2024-25						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	20.00	20.00	10.00	3.34	0.33
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	2,663.18	172.87	2,836.05	2,749.62	5.28	145.18
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	28.25	0.00	28.25	28.25	15.00	4.24
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	2,691.43	192.87	2,884.30	2,787.87	0.00	149.75
Weighted Average Rate of Depreciation(%)					5.371484	

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

Civil & Building	20.00	0.00	20.00	20.00	3.34	0.67
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	2,836.05	0.00	2,836.05	2,836.05	5.28	149.74
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	28.25	0.00	28.25	28.25	15.00	4.24
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	2,884.30	0.00	2,884.30	2,884.30	0.00	154.65
Weighted Average Rate of Depreciation(%)					5.361786	

2026-27						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	20.00	0.00	20.00	20.00	3.34	0.67
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	2,836.05	0.00	2,836.05	2,836.05	5.28	149.74
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	28.25	0.00	28.25	28.25	15.00	4,24
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	2,884.30	0.00	2,884.30	2,884.30	0.00	154.65
Weighted Average Rate of Depreciation(%)					5.361786	ORATION O

2027-28						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	20.00	0.00	20.00	20.00	3.34	0.67
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	2,836.05	0.00	2,836.05	2,836.05	5.28	149.74
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	28.25	0.00	28.25	28.25	15.00	4.24
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	2,884.30	0.00	2,884.30	2,884.30	0.00	154.65
Weighted Average Rate of Depreciation(%)					5.361786	

2028-29						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	20.00	0.00	20.00	20.00	3.34	0.67
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	2,836.05	0.00	2,836.05	2,836.05	5.28	149.74
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	28.25	0.00	28.25	28.25	15.00	4.24
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	2,884.30	0.00 1	2,884.30 17	2,884.30	0.00	154.65

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0671001 : 1X500 MVA, 400/220 kV ICT augmentation along with associated bayes

	1			
Weighted Average Rate of Depreciation(%)		===	5.361786	

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# **Statement of Depreciation**

Name of the	Fransmission Licensee	Power Grid Corporati	on of India Limited	
Project	ICT Augmentation at 2x	315 MVA 400/220 KV	Shujalpur (PG) Sul	bstation
Element Description	1X500 MVA, 400/220 kV	/ ICT augmentation al	ong with associated	d bays Shujalpur (PG)
Region	Western Region		DOCO Date	Jan 13, 2023

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
Life at the beginning of the year	·		'		
1.1 Weighted Average useful life of the Asset/ Project	25.00	25.00	25.00	25.00	25.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	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)	24.00	23.00	22.00	21.00	20.00
Capital Base					
1.4 Opening capital cost	2,691.43	2,884.30	2,884.30	2,884.30	2,884.30
1.5 Additional Capital Expenditure dr. the year	192.87	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	2,884.30	2,884.30	2,884.30	2,884.30	2,884.30
1.8 Average capital cost	2,787.87	2,884.30	2,884.30	2,884.30	2,884.30
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	28.25	28.25	28.25	28.25	28.25
1.11 Asset having 10% salvage value included in 1.8	2,759.62	2,856.05	2,856.05	2,856.05	2,856.05
1.12 Depreciable Value(1.10+90% of 1.11)	2,511.91	2,598.70	2,598.70	2,598.70	2,598.70
Depreciation for the period and Cum. Depreciation			4		
1.13 Weighted Average Rate of depreciation	5.371484	5.361786	5.361786	5.361786	5.361786

1.14 Depreciation(for the period)	149.75	154.65	154.65	154.65	154.65
1.15 Depreciation(Annualised)	149.75	154.65	154.65	154.65	154.65
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	93.58	243.33	397.98	552.63	707.28
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	243.33	397.98	552.63	707.28	861.93



# **Calculation of interest on working Capital**

Name of the	Transmission Licensee	Power Grid Corpora	ation of India Limi	ted
Project	ICT Augmentation at 2x3	15 MVA 400/220 KV	Shujalpur (PG) S	Substation
Element Description	1X500 MVA, 400/220 kV	ICT augmentation al	long with associa	ted bays Shujalpur (PG)
Region	Western Region		DOCO Date	Jan 13, 2023

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
O&M Expenses-one month	15.10	15.90	16.72	17.59	18.55
Maintenance spares 15% of O&M Expenses	27.18	28.62	30.09	31.65	33.39
Receivables equivalent to 45 days of AFC	79.85	81.51	81.19	80.72	80.85
Total Working capital	122.13	126.03	128.00	129.96	132.79
Bank Rate as on 01.04.2024 or as on 01st April of the COD year,whichever is later.	11.90	11.90	11.90	11.90	11.90
Interest on working capital	14.53	15.00	15.23	15.47	15.80
Pro rata interest on working capital	14.53	15.00	15.23	15.47	PORA) 15.80

(Petitioner)

		Summary of issue invo	olved in the petition	PART-III FORM-15
1. Name	e of the Pet	titioner	Power Grid Corporation of In	dia Limited
2. Petiti	on Catego	гу	Transmission	
3. Tariff			2019-24	
4. Name	e of the Pro	oject	ICT augmentation at 2x315 M substation" in Western Region	AVA, 400/220 kV Shujalpur (PG) n
5. Inves	tment App	proval date	07.10.2021	
6. SCOI	O of the Pro	pject	31.10.2022	
		COD of the project	13.01.2023	
8. Whet	her entire	scope is covered in the present petition.	Yes	
		wered in instant petition	l no	
10. No.	of Assets h	naving time over run	l no	
		ect Cost as per IA	Rs.3282.98 Lakh	
		EC? if so, provide the date	NA	
13. Revi	ised Estima	ated Project Cost (if any)	NA	
14. Com	npletion co	st for all the assets covered in the instant petition.	Rs. 2691.43 Lakh	
15. No.	of Assets o	overed in instant petition and having cost overrun.	N.A.	
16	Prayer in		h	
17	Key detai	ls and any Specific issue involved		
18	Responde	ents		
	Name of l	Respondents		
	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		
				PORA

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			Sumn	Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL the assets covered in the present netition.	k Annual Fixed Co	ost (AFC) Claime	d for ALL th	le assets co	ered in the pr	esent netition.	PART-III		
Name of t	Name of the Petitioner				Powerurid Cornoration of India Limited	on of India Limited			4	7			
Tariff Period	iod				2019-24								
Name of	Name of the Transmission Project	Project			ICT augmentation at	ICT augmentation at 2x315 MVA, 400/220 kV Shujalpur (PG) substation" in Western Region	20 kV Shujalpu	ır (PG) substa	ion" in Western I	Region			
COD/E-C	COD/E-COD of the Project (if entire scope of project is completed)	(if entire scope	of project is com	pleted)	13.01.2023								
													Rupees in lakhs
A) Summ	ary of Capital Cos	t as on COD at	nd Additional Ca	A) Summary of Capital Cost as on COD and Additional Capital Expenditure clai	claimed for all the assets Covered in the instant petition.	sets Covered in t	he instant p	etition.					
		COD/E-	Cut-off Date	i) Apportioned Approved Cost	pproved Cost	ii) Summary of Actual / Projected Capital Cost	Actual / Pro	jected Capi	tal Cost				Capital Cost as on Cut-off Date
S. No.	Asset No.	3		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	2	m	4	ιν	9	7	80	6	10	11= (5+6+7+8+9+10)	12
1	Aseet-1	13.01.2023	31.01.2026	3282.98		468.66	0	0	0	109.13	2113.64	2691.43	
				3282.98	0.00	468.66	0.00	0.00	0.00	109.13	2113.64		
B) Summ	ry of Annual Fixe	d Cost (AFC) o	laimed for all th	B) Summary of Annual Fixed Cost (AFC) claimed for all the assets covered in the	the instant petition.								
S. No.	Asset No.			Asset Nam	Asset Name and its location				2019-20	2020-21	2021-22	2022-23	2023-24
1	1	1x500 MVA, 40	00/220 kV ICT aug	1x500 MVA, 400/220 kV ICT augmentation along with as	associated bays at Shujalpur (PG) substation	jalpur (PG) substat	ion		Ϋ́	Ą	Ϋ́	92	551.95
			Tota	Total AFC for all the Assets	ts				0	0.00	0.00	76.00	551.95
Note: 1) T	e purpose of this	form is to sum	marise the Capita	Note: 1) The purpose of this form is to summarise the Capital cost & AFC claimed for all the assets covered in the instant petition.	for all the assets co	vered in the insta	ant petition.						



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	1
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	1
FORM-3	Normative parameters considered for tariff computations	1
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.	
FORM- 4A	Statement of Capital cost	/
FORM- 4B	Statement of Capital Works in Progress	<b>✓</b>
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.
ORM-5B	Details of all the assets covered in the project	N.A.
ORM-6	Actual Cash Expenditure and Financial Package up to COD	N.A.
ORM-7	Statement of Additional Capitalisation after COD	1
FORM- 7A		/
	Financing of Additional Capitalisation	1
ORM-7B	Statement of Additional Capitalisation during five year before the end of the useful life of the project.	N.A.
ORM-8	Calculation of Return on Equity	1
FORM-8A	Details of Foreign Equity	N.A.
FORM-9	Details of Allocation of corporate loans to various transmission elements	N.A.
ORM-9A	Details of Project Specific Loans	N.A.
ORM-9B	Details of Foreign loans	N.A.
ORM-9C	Calculation of Weighted Average Rate of Interest on Actual Loans	√ ·
ORM-9D	Loans in Foreign Currency	N.A.
ORM-9E	Calculation of Interest on Normative Loan	√.A.
ORM- 10	Calculation of Depreciation Rate on original project cost	1
ORM- 10A	Statement of Depreciation	1
ORM- 10B	Statement of De-capitalisation	N.A.
ORM- 11	Calculation of Interest on Working Capital	1
ORM- 12	Details of time over run	N.A.
ORM- 12A	Incidental Expenditure during Construction	N.A.
ORM- 12B	Calculation of IDC & Financing Charges	N.A.
ORM- 13	Details of Initial spares	N.A.
ORM- 14	Non-Tariff Income	N.A.
ORM- 15	Summary of issue involved in the petition	N.A.
ORM A	Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL	N.A.
Other Information/ D i. No.	Information/Document	Ticl
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC)	N.A.
2	Region wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & Annexure for the new Transmission System & Communication System for the relevant years.	N.A.
3	Copies of relevant loan Agreements	N.A.
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	N.A.
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	N.A.
6	Copies of the BPTA/TSA/PPA with the beneficiaries, if any	N.A.
7	Detailed note giving reasons of cost and time over run, if applicable. List of supporting documents to be submitted:  a. Detailed Project Report  b. CPM Analysis  c. PERT Chart and Bar Chart  d. Justification for cost and time Overrun	N,A,
8	Transmission Licensee shall submit copy of Cost Audit Report along with cost accounting records, cost details, statements, schedules etc. for the transmission system as submitted to the Govt. of India for first two years i.e. 2019-20 and 2020-21 at the time of mid-term true-up in 2021-22 and for balance period of tariff period 2019-24 at the time of final true-up in 2024-25. In case of initial tariff filing the latest available Cost Audit Report should be furnished.	N.A.
9.	BBMB is maintaining the records as per the relevant applicable Acts. Formats specified herein may not be suitable to the available information with BBMB. BBMB may modify formats suitably as per available information to them for submission of required information for tariff purpose.	N.A.
10.	Any other relevant information, (Please specify)	N.A.
Note 1. Florings	is conv. of the notition (in words format) and detailed calculation as nor those formats (in excel format	4\ 411-

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.