

# पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड

(भारत सरकार का उदाम)

#### **POWER GRID CORPORATION OF INDIA LIMITED**

(A Government of India Enterprise)

CCL: POWERGRID/TRUE UP/WR/Line bays and Reactor/

दिनांक: 29.07.2024

सचिव.

केंद्रीय विदयुत विनियामक आयोग (सी.ई.आर.सी.) छठवाँ, सातवाँ एवं आठवाँ तल, टॉवर बी, वर्ल्ड ट्रेड सेंटर, नौरोजी नगर, नई दिल्ली-110029

विषय:- Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for assets under "Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard" 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 Conditions of Tariff) Regulations 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulation 2024

## महोदय.

उपरोक्त पारेषण प्रणाली के वर्ष 01.04.2019 से 31.03.2024 तथा 01.4.2024 से 31.3.2029 तक के पारेषण टैरिफ हेतु याचिका की 2 प्रतियां (1 मूल व 1 प्रतियां) संलग्न है। पूर्ण याचिका को पावरग्रिड की बेवसाइट पर दर्शाया गया है जिसका पता www.powergrid.in है। माननीय आयोग दवारा जारी सार्वजनिक सूचना दिनांक 25.08.2010 के अनुसार राशि का भुगतान वार्षिक फाईलिंग फीस के माध्यम से किया गया है। याचिका शुल्क की गणना नई फीस रेगुलेशन, 2012 के पैरा 3(2) के तहत दिये गये निर्देशों के आधार पर निम्ननुसार की गई है:-

Asset	Period	Fin. Year	Revised Tariff (T) (Rs. In Lakh)	Petition Filing fees already paid (A) (Rs.)	Revised Petition filing fees @of Tariff (R)	Revised Petition filing fees (B)=(T)X® (Rs.)	Rounded to nearest 100 (min. 40,000: 2009-12 and min. 1,00,000: 2012-20 (Rs.)	Net Filing fee Payable (Rs.) (B-A)
	20 452.66 2020- 2020- 21 453.02 1,0 2019- 24 2021- 22 454.81 1,0 2022- 23 455.1 1,0		452.66	1,00,000.00	0.11%	49792.60	100000	0
			453.02	1,00,000.00	0.11%	49832.20	100000	0
Combined			454.81	1,00,000.00	0.11%	50029.10	100000	0
Asset		_	455.1	1,00,000.00	0.11%	50061.00	100000	0
		1,00,000.00	0.11%	50273.30	100000	0		
	2024- 25	2024- 25	417.16	1,00,000.00	0.11%	45887.60	100000	0
Total				Filing fee	payable			0

केन्द्रीय कार्यालय : "सौदामिनी" प्लॉट सं. 2, सैक्टर—29, गुरुग्राम—122001, (हरियाणा), दूरमाष : 0124—2571700—719 Corporate Office : "Saudamini", Plot No. 2, Sector-29, Gurugram-122001, (Haryana) Tel. : 0124-2571700-719 vo/

The instant petition is being filed under "Applicable for Waiver" head of the CERC e-filing portal.

माननीय आयोग दवारा जारी CBR, 2023 के पैरा 23(4) के तहत दिये गये निर्देशों के आधार पर याचिका की प्रति सभी प्रतिवादियों को ईमेल दवारा भेजी गई है तथा ईमेल की प्रति संलग्न है| याचिका ई-फाइल कर दी गई है। माननीय आयोग से निवेदन है कि याचिका को स्वीकृत किया जाए। कृपया पावती भेजें।

भवदीय,

(ज़फ़रुल हसन) महाप्रबंधक वाणिज्यिक पावस्वाड प्राप्ति क्षावस्वाड

Particulars	
1. Name of the Petitioner/Applicant	POWERGRID
2. Address of the Petitioner/Applicant	"SAUDAMINI", Plot no 2, Sector 29, Gurgaon
3. Subject Matter	Petition for truing up of Transmission tariff for 2019- and determination of transmission tariff for 2024- tariff block for assets under "Bhadrawati-Chandrap 400 kV D/C transmission line including bays Bhadrawati (Powergrid) Switching Static (Extensions) and Chandrapur (MSEB) Switchyard" Western region.
4. Petition No., if any	Previous petition: 304/TT/2019
5. Details of generation assets	1 1 2 1 3 4 7 1 1 / 2019
a) generating station/units b) Capacity in MW (c) Date of commercial operation (d) Period for which fee paid (e) Amount of fee paid f) Surcharge, if any	N. A
Details of transmission assets	Asset:
a) Transmission line and sub-stations b) Date of commercial operation	Asset 1- Bhadrawati-Chandrapur 400 kV D/transmission line including bays at Bhadrawat (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard" in Western region  Asset-1 01.05.2006
c) Period for which fee paid / adjusted d) Amount of fee paid g) Surcharge, if any	2019-24 & 2024-25 Rs. 0.00/- N.A
Fee paid for Adoption of tariff	
or (a) Generation asset	N.A.
) Transmission asset	IV.A.
Application fee for cense (a) Trading license (b) Transmission license (considerate of the paid	N.A.
Fees paid for Miscellaneous Application  Fees paid for Interlocutory Application	N.A.
. Fee paid for Regulatory Compliance petition	N.A.
Fee paid for Review Application	N.A.
Licence fee for inter-State Trading	IV.A.
(a) Category	-
(b) Period	N.A.
(c) Amount of fee paid	
(d) Surcharge, if any	
. License fee for inter-State Transmission	ORATION
(a) Expected/Actual transmission charge	N.A.

signatory with date	(General Manager) Date: 29.07.2024
Signature of the authorized	Shri. Zafrul Hasan (General Manager)
	e compulsory, the rest may be filled up as applicable
c) Amount remitted	
remittance	
b) Date of	
(a) UTR No.	
16. Details of fee remitted	Applicable for waiver of filing fee
(d) Surcharge, if any	
(c) Fee paid	
(b) Amount of turnover	N.A.
(a) Period	
Exchange	Wei
15. Annual Registration Charge for Po	WAr
(d) Surcharge, if any	
(c) Amount of fee calculated as a p transmission charge.	

#### BEFORE

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

<b>Petition</b>	No	/TT/
		_

## IN THE MATTER OF: -

Subject matter: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard 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 Name

Registered office: B-9, Qutab Institutional Area,

Katwaria Sarai, New Delhi, 110 016.

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

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

---Respondent Name

Madhya Pradesh Power Management Company Ltd... Shakti Bhawan, Rampur, Jabalpur-482008.

And others

Place: Citygo on

Date: 29/7/24

**Petitioner** 

**General Mana** 

#### **BEFORE**

# THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

<b>PETITION N</b>	10.:
-------------------	------

#### IN THE MATTER OF:

**Subject matter**: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard 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-482008.

#### And others

#### **INDEX**

SI. No.	Description	Enclosure No.	Page No.
	Cover Page	-	Α
	Form-1		В
1	Index	-	01-03
2	Letter for registration	-	04-05
3	Memo of Parties	-	06-07
4	Memo of appearance		08-09
5	Petition for truing up of transmission tariff for	-	10-23
	2019-24 and determination of transmission	PORATION	

	tariff for 2024-29 tariff block		
6	Supporting Affidavit		24-25
	ANNEXURES:	,	
7	CERC order dated 20.05.2021 in petition no.304/TT/2019	Encl –1	26-70
8	True up tariff forms for 2019-24 block	Encl –2	71-109
9	Tariff Forms for 2024-29 block along with loan interest proof	Encl –3	110-146
10	Summary (Form-15)	Encl -4	147
11	Checklist	-	148

**FILED BY** 

POWER GRID CORPORATION OF INDIA LTD.

**GURGAON** 

**DATED: 29.07.2024** 

REPRESENTED BY

Zafrul Hasan

General Manager (Confinercial)

#### **BEFORE**

# THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## IN THE MATTER OF:

**Subject matter**: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard 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-482008.

And others

То

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 resolvith Central

4 . . . 04

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: 29:03.2024

POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY

General Manager

#### **BEFORE**

# THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

PETITIC	N NO.	
---------	-------	--

## IN THE MATTER OF:

**Subject matter**: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block **for** Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard 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-482008.

And others

## **MEMO OF PARTIES**

**Power Grid Corporation of India Ltd.** 

Registered office: B-9, Qutab Institutional Area,

Katwaria Sarai, New Delhi. 110 016.

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

#### **VERSUS**

MADHYA PRADESH POWER MANAGEMENT COMPANY LTD.
 SHAKTI BHAWAN, RAMPUR



---PETITIONER

JABALPUR - 482 008
REPRESENTED BY ITS MD

#### 2. MADHYAPRADESH AUDYOGIK KENDRA

VIKAS NIGAM (INDORE) LTD.
3/54, PRESS COMPLEX, AGRA-BOMBAY ROAD, INDORE-452 008
REPRESENTED BY ITS MD

# 3. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.

HONGKONG BANK BUILDING, 3RD FLOOR M.G. ROAD, FORT, MUMBAI-400 001. REPRESENTED BY ITS MD

## 4. GUJARAT URJA VIKAS NIGAM LTD.

SARDAR PATEL VIDYUT BHAWAN, RACECOURSE ROAD, VADODARA - 390 007 REPRESENTED BY ITS CHAIRMAN

# 5. **ELECTRICITY DEPARTMENT**

GOVT. OF GOA, VIDYUT BHAWAN, PANAJI, NEAR MANDVI HOTEL, GOA - 403 001 REPRESENTED BY ITS CHIEF ENGINEER (ELECTRICAL)

## 6. **ELECTRICITY DEPARTMENT**

ADMINISTRATION OF DAMAN & DIU DAMAN - 396 210 REPRESENTED BY ITS SECRETARY (FIN.)

# 7. DNH POWER DISTRIBUTION CORPORATION LIMITED.

VIDYUT BHAWAN, 66KV ROAD, NEAR SECRETARIAT AMLI, SILVASSA - 396 230 REPRESENTED BY ITS SECRETARY (FIN.)

8. CHHATTISGARH STATE POWER DISTRIBUTION CO. LTD.

P.O. SUNDER NAGAR, DANGANIA, RAIPUR CHHATTISGARH-492 013 REPRESENTED BY ITS CHAIRMAN

**PETITIONER** 

POWER GRID CORPORATION OF INDIA LTD.

**GURGAON** 

DATED: 29/7/2024

REPRESENTED BY

Zafru

General Manager (Commercial)

#### BEFORE

# THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. ----/TT/----

IN THE MATTER OF: Subject matter: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard 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.

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

--- RESPONDENT

#### MEMO OF APPEARANCE

### POWER GRID CORPORATION OF INDIA LTD.

-- PETITIONER

- 1. Shri Dilip Nagesh Rozekar, ED (Commercial & RC), POWERGRID
- 2. Shri Mohd. Mohsin, Chief GM (Comml- Petition), POWERGRID
- 3. V. Srinivas, Chief GM (Comml-BCD), POWERGRID
- 4. V.C. Sekhar, Sr. GM (Commercial-RC), POWERGRID



n

# 5. Shri Zafrul Hasan, GM (Comml- Petition), 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 --- day of June 2024.

**PETITIONER** 

POWER GRID CORPORATION OF INDIA LTD.

GURGAON
DATED: 29:03:2024

General Manage

# BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION

N	E	W	D	E	L	Н	I
-							

<b>PETITIO</b>	N NO	
	14 110	 

IN THE MATTER OF: Subject matter: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard 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

- 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.

LO AU

and economical interstate transmission system ("ISTS"). POWERGRID operates and functions within the regulatory control of this Hon'ble Central Electricity Regulatory Commission (hereinafter referred to as "Hon'ble Central Commission"). Tariff for the transmission system established by POWERGRID is required to be determined by this Hon'ble Central Commission in accordance with the Tariff Regulations as notified by this Hon'ble Central Commission in exercise of its powers under Section 178 of the Electricity Act, 2003.

# (ii) Brief background of the Respondent(s):

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

# (iii) Background of Transmission Assets:

2. POWERGRID has filed the present petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for the following Assets under "Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard in Western Region:

Asset No	Asset Name	DOCO
Asset-I	Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard in Western Region	01.05.2006

# (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 augusts.

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-a cis claimed capital cost as on 31.03.2019 and additional capital expenditure during 2019-24 and 2024-29 tariff block is as under:

## Rs in lakhs

Asset No.	Apportioned Approved Cost as per FR	Apportioned approved cost as per RCE		Expenditure during 2019-24 tariff block 2019-24	Actual Cost as on 31.03.2024
1	3338.00	4109	3779.90	No add cap	3779.90

# Rs in lakhs

	Apportioned	Apportioned		Estimated	Estimated
Asset	Approved	approved	Expenditure Up to	expenditure during	completion
No.	Cost as per	cost as per	31.03.2024	2024-29 tariff block	Cost as on
	FR	RCE		2024-29	31.03.2029
1	3338.00	4109	3779.90	No add cap	3779.90

- 5. It is prayed to hon'ble commission to reimburse expenditure of petition filing fee, license fee, newspaper publication expanses and RLDC fee & charges etc.
- 6. Details of tariff claimed are as under:

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

# Rs in Lakhs

Name of the asset	Particular	2019-20	2020-21	2021-22	2022-23	2023-24	
	AFC approved	452.66	453.02	455.52	455.83	456.31	
Asset-1	Revised AFC based on truing up	452.66	453.02	454.81	455.10	457.03	

12

Tariff claimed for 2024-29 tariff block:

Rs in Lakhs

2024-25	2025-26	2026-27	2027-28	2028-29
417.16	421.47	428.93	437.24	446.03

## **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	Remarks
Asset -1	Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard	01.05.2006	Earlier covered under petition no. 304/TT/2019 now covered under instant petition

# 10. Cost detail:

The capital cost of Rs. 3779.90 Lakhs for subject Asset has been admitted by Hon'ble commission vide order dated 06.07.2021 in petition no. 304/TT/2019. Copy of order is

enclosed as **Encl-1**. In the current petition, no additional capital expenditure was incurred during the 2019-24 tariff block, and no additional capital expenditures are proposed during the 2024-29 tariff block.

# 11. <u>Transmission tariff:</u>

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	up ROE (Base rate/(1-t)
2019-20	Assessment Order	24,52,62,76,991	1,40,37,47,53,855	17.472%	18.782%
2020-21	Assessment Order	26,08,93,59,008	1,49,32,09,65,036	17.472%	18.782%
2021-22	Actual Tax paid	31,81,46,40,406	1,82,08,92,88,030	17.472%	18.782%
2022-23	Actual Tax paid	30,42,88,20,993	1,74,15,76,29,306	17.472%	18.782%
2023-24	Applicable Rate #		#	17.472%	18.782%

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

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

calculated based the applicable MAT rate (i.e. MAT 15% + Surcharge 12.00% + Cess 4%), for the purpose of grossing up of ROE rate.

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

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

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

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

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

Rs in Lakh

Asset		2019-20	2020-21	2021-22	2022-23	2023-24
Asset-	AFC approved	452.66	453.02	455.52	455.83	456.31
455EL-	Revised AFC	452.66	453.02	454.81	455.10	457.03
•	based on truing up					

Tariff Filing Formats along with the other relevant information and supporting documentation are attached hereto as **Encl-2**.

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
Asset-1	AFC	417.16	421.47	428.93	437.24	446.03

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

- 14. The asset will complete 12 yrs during the tariff block 2014-19 and thus depreciation for FY 2019-24 & 2024-29 has been calculated based on remaining depreciable value to be recovered in the balance useful life. 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 later in another truing up petition. Further, interest rate proof documents shall be available on our website www.powergridindia.in.

18. The transmission charges at para-12 & 13 above is inclusive of O&M expenses derived for the subject asset based on the norms for O&M expenditure for Transmission System as specified under regulation 36 (3) (a) of the tatiff 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 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 filling 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 18 above shall be recovered on monthly basis in accordance with Regulation 57 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and shall be shared by the beneficiaries and long-term transmission customers in Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 or as amended from time to time.

Tariff for Transmission of Electricity (Annual Fixed Cost) for 2024-29 as per para 19 above shall be recovered on monthly basis in accordance with Regulation 78 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 and shall be shared by the beneficiaries and long-term transmission customers in 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.-3 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) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 and Tariff regulations 2024 as per para 12 and 13 above for respective block.
- d) Approve the reimbursement of expenditure by the beneficiaries towards perfion fee, and expenditure on publishing of notices in newspapers in terms of Resources.

- (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, and other expenditure (if any) in relation to the filing of petition.
- e) Allow the petitioner to bill and recover Licensee fee and RLDC fees & charges, separately from the respondents in terms of Regulation 94 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.
- f) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2024-29 period, if any, from the respondents.
- g) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 19 above.
- h) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall insurance expenses and consequential IOWC on that insurance expenses as mentioned at para 19 above.
- Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall capital spares at the end of tariff block as per actual as mentioned at Para 19 above.
- j) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition as mentioned at para 20 above.
- k) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.
- I) Allow the petitioner to recover the shortfall or refund the excess

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.

m) Further it is submitted that deferred tax liability before 01.04.2009 shall be recoverable from the beneficiaries or long-term customers / DIC, as and when the same materialized as per regulation 67 of 2019 and regulation 89 of 2024 tariff regulation. The petitioner may be allowed to recover the deferred tax liability materialized directly without making any application before the commission as provided in the regulations.

**FILED BY** 

GURGAON
DATED:--.06.2024

POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

General Manager (COMME

#### BEFORE

# THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

P	E.	T	ľ	T		0		V	P	V	0							18				
---	----	---	---	---	--	---	--	---	---	---	---	--	--	--	--	--	--	----	--	--	--	--

IN THE MATTER OF: Subject matter: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard 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).

**Assam Power Distribution Company Limited** 

--- RESPONDENT

04<sup>th</sup> Floor, Bijulee Bhawan, Paltan Bazar, Guwahati – 781001, Assam Represented by its Managing Director

# **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 safety 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.

4 OF Y

- 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 29<sup>th</sup> day of July' 2024 that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.

(DEPONENT)

ATTESTED

MAHENDER S. PUNIS

ADVOCATE & NOTARY
Distt. Gurugram (Haryana) India

# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

# Petition No. 304/TT/2019

Coram:

Shri P.K. Pujari, Chairperson Shri I.S. Jha, Member Shri Arun Goyal, Member Shri Pravas Kumar Singh, Member

Date of order: 06.07.2021

#### In the Matter of

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and revision of transmission tariff of 2004-09 and 2009-14 periods and truing-up of transmission tariff of 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard in Western Region.

#### And in the Matter of:

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

.....Petitioner

Vs.

- Madhya Pradesh Power Management Company Ltd., Shakti Bhawan, Rampur, Jabalpur-482008.
- Madhya Pradesh Power Transmission Company Ltd., Shakti Bhawan, Rampur, Jabalpur-482008.
- Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd., 3/54, Press Complex, Agra-Bombay Road, Indore-452008.



STATE OF THE STATE

- 4. Maharashtra State Electricity Distribution Co. Ltd., Hongkong Bank Building, 3rd Floor, M.G. Road, Fort, Mumbai-400001.
- Maharashtra State Electricity Transmission Co. Ltd., 5. Prakashganga, 6th Floor, Plot No. C-19, E-Block, Bandra Kurla Complex, Bandra (East). Mumbai-400051.
- 6. Gujarat Urja Vikas Nigam Ltd., Sardar Patel Vidyut Bhawan, Race Course Road. Vadodara-390007.
- 7. Gujarat Energy Transmission Corporation Ltd., Sardar Patel Vidyut Bhawan, Race Course Road. Vadodara-390007.
- 8. Electricity Department, Government of Goa. Vidvut Bhawan, Panaji, Near Mandvi Hotel. Goa-403001.
- 9. Electricity Department, Administration of Daman & Diu. Daman-396210.
- 10. Electricity Department, Administration of Dadra Nagar Haveli, U.T., Silvassa-396230.
- 11. Chhattisgarh State Electricity Board, P.O. Sunder Nagar, Dangania, Raipur, Chhattisgarh-492013.
- 12. Chhattisgarh State Power Transmission Co. Ltd., Office of The Executive Director (C&P), State Load Despatch Building, Dangania, Raipur-492013.
- 13. Chhattisgarh State Power Distribution Co. Ltd., P.O. Sunder Nagar, Dangania, Raipur, Chhattisgarh-492013.

For Petitioner

Shri S.S. Raju, PGCIL Shri A.K. Verma, PGCIL Shri B. Dash, PGCIL

Shri Ved Prakash Rastogi, PGCIL

...Respondent(s)



For Respondents:

Shri Anindya Khare, MPPMCL

# <u>ORDER</u>

The instant petition has been filed by the Petitioner, Power Grid Corporation of India Ltd., a deemed transmission licensee, for revision of transmission tariff of 2004-09 and 2009-14 periods, truing up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and for determination of tariff of 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") for Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard (hereinafter referred to as the "transmission asset") in Western Region.

- 2. The Petitioner has made the following prayers in this petition:
  - "1)Approve the revised Transmission Tariff for 2004-09 block and transmission tariff for 2009-14 block for the asset covered under this petition, as per para 8 above.
  - 2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 9 and 10 above.
  - 3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 9 and 10 above for respective block.
  - 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition
  - 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges,





Page 3 of 45

separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

- 6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.
- 7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 10.5 above.
- 8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

# Backdrop of the case

- 3. The brief facts of the case are as follows:
  - (a) The Investment Approval (IA) for the transmission asset was accorded by the Board of Directors (BOD) of the Petitioner Company vide letter dated 13.7.2004 at an estimated cost of ₹3338.00 lakh, including IDC of ₹150.00 lakh. Subsequently, the Revised Cost Estimate (RCE) was approved by BOD of the Petitioner Company vide memorandum dated 29.1.2007 at an estimated cost of ₹4109.00 lakh, including IDC of ₹47.00 lakh.
  - (b) The transmission asset was put into commercial operation on 1.5.2006. The transmission tariff for the transmission asset from COD to 31.3.2009 was determined vide order dated 28.5.2008 in Petition No. 145/2007. The Petitioner's claim for Additional Capital Expenditure (ACE) of ₹614.66 lakh during 2006-07 period was also approved vide order dated 28.5.2008 in Petition No. 145/2007. ACE of ₹175.26 lakh during 2007-08 period was approved vide order dated 18.6.2009 in Petition No. 56/2009 and ACE of ₹31.78 lakh during





2008-09 period was approved vide order dated 7.4.2010 in Petition No. 314/2009.

- (c) The transmission tariff for the transmission asset from 1.4.2009 to 31.3.2014 was determined vide order dated 24.11.2010 in Petition No. 152/2010. Further, the transmission tariff of 2009-14 tariff period was trued-up and transmission tariff for 2014-19 period was determined vide order dated 7.10.2015 in Petition No. 153/TT/2014.
- (d) The Petitioner has sought revision of transmission tariff approved for 2004-09 tariff period on account of change in Interest on Loan (IoL) and Interest on Working Capital (IWC) to the extent of revision in IoL and in Maintenance Spares in terms of the judgements of the Appellate Tribunal for Electricity (APTEL) dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters. The Petitioner has sought consequential revision of transmission tariff allowed for 2009-14 tariff period, truing-up of tariff of 2014-19 tariff period and determination of transmission tariff of 2019-24 tariff period for the transmission asset.
- (e) APTEL in judgment dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters pertaining to generating stations of NTPC had considered 4 (four) issues. The issues considered by APTEL and its decisions are as given in the following table:

Sr. No.	Issue	APTEL's decision/direction
1	Whether APTEL can enquire into the validity of Regulations framed by the Commission	Challenge to the validity of Regulations framed by the Commission falls outside the purview of APTEL.
2	Computation of interest on loan	In view of the order of the APTEL dated 14.11.2016 in Appeal Nos. 94 and 96 of 2005 and order dated 24.1.2007 passed in Appeal Nos. 81 to 87, 89 to 93 of 2005, computation of loan has to be based on loan repayment on normative basis. Commission is required to recalculate the loan outstanding as on 31.3.2004 based on loan repayment on normative basis.





3(a)	O&M Expenses: Inadequate provision of employee costs as part of O&M Expenses due to variation in salary and wages	Commission's view upheld.
3(b)	O&M Expenses: Non-inclusion of incentives and ex-gratia payment to employees	Commission's view upheld.
4	Cost of spares for calculation of working capital	Commission's view upheld.

(f) APTEL in its judgment dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters pertaining to generating stations of NTPC had considered 9 (nine) issues. The issues considered and the decisions of APTEL are given in the following table:

Sr.	Issue	APTEL's decision/direction
No.		
I	Computation of outstanding loan at the beginning of the tariff period i.e. 1.4.2004	The Commission is required to recalculate the loan outstanding as on 31.3.2004 based on loan repayment on normative basis.
II	Consequence of refinance of loan	Commission to consider the issue afresh.
III	Treating depreciation available as deemed repayment of loan	Commission to make a fresh computation of outstanding loan.
IV	Admissibility of depreciation up to 90%	Commission to consider the issue afresh.
V	Cost of Maintenance Spares	Commission to consider the issue afresh.
VI	Impact of de-capitalisation of the assets on cumulative repayment of Loan	The cumulative repayment of the loan proportionate to the assets decapitalized required to be reduced. Commission to act accordingly.
VII	Non-consideration of normative transit loss for coal import.	Commission to consider afresh the transit losses for coal imported from coal mines other than the dedicated ones.
VIII	Foreign Exchange rate variation (FERV)	FERV has been kept as pass through to ensure that any liability or gain, if any, arising on account of any variation in foreign exchange rates is passed on to the beneficiary as held in order dated 4.10.2006 in Appeal No.135 to 140 of 2005. Commission to act accordingly.
IX	Computation of interest on loan in Singrauli Station	Net loan closing at the end of a year is reflected as net loan opening on the first day of the next year. Commission shall recompute the interest accordingly.

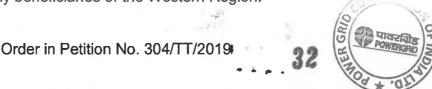
(g) The Commission and certain interested parties preferred Civil Appeals against the APTEL's judgments before the Hon'ble Supreme Court in 2007. The



Appeals were admitted and initially stay was granted by the Hon'ble Supreme Court. Subsequently, on an assurance by NTPC that the issues under Appeal would not be pressed for implementation during the pendency of the Appeals, the stay was vacated by the Hon'ble Supreme Court.

- (h) Based on APTEL's judgments dated 22.1.2007 and dated 13.6.2007, the Petitioner had sought revision of tariff of its transmission assets for the tariff periods 2001-04 and 2004-09 tariff periods vide Petition No. 121/2007. The Commission after taking into consideration the pendency of Appeals before the Hon'ble Supreme Court adjourned the said petition *sine die* and directed that the same be revived after the disposal of Civil Appeals by the Hon'ble Supreme Court.
- (i) The Hon'ble Supreme Court vide its order dated 10.4.2018, dismissed the Civil Appeals filed against APTEL's judgments. Thus, the judgements of APTEL have attained finality.
- (j) Consequent to the Hon'ble Supreme Court's order dated 10.4.2018 in NTPC matters, Petition No. 121/2007 was listed for hearing on 8.1.2019. The Commission vide order dated 18.1.2019 in Petition No. 121/2007, directed the Petitioner to submit its claim separately for the assets at the time of filing of truing up petition for the 2014-19 tariff period in respect of concerned transmission assets.
- (k) The instant petition was heard on 6.4.2021 and in view of APTEL's judgments dated 22.1.2007 and 13.6.2007 and the order of Hon'ble Supreme Court dated 10.4.2018, tariff is being revised. Tariff period-wise transmission tariff is being re-worked based on the Tariff Regulations applicable for the respective tariff periods and suitable assumptions have been made at certain places and applied which are indicated.
- 4. The Respondents are distribution licensees, power departments and transmission licensees which are procuring transmission service from the Petitioner mainly beneficiaries of the Western Region.

Page 7 of 45



5. The Petitioner has served the petition on the Respondents and notice regarding filing 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 newspaper by the Petitioner. Madhya Pradesh Power Management Company Ltd. (MPPMCL), Respondent No. 1, has filed its reply vide affidavit dated 3.2.2020 and has raised the issues of prudence check before revising the tariff and grossing up of RoE by the Petitioner. The Petitioner has submitted its rejoinder vide affidavit dated 26.3.2021 to the reply filed by MPPMCL. The issues raised by MPPMCL and the clarifications given by the Petitioner are dealt in the relevant paragraphs of this order.

#### Re: Interest on Loan (IoL)

6. APTEL while dealing with the issue of computation of IoL, in judgment dated 22.1.2007, observed that IoL for the period from 1.4.1998 to 31.3.2001 shall be computed only on normative Ioan repayment as per its judgment dated 14.11.2006 in Appeal Nos. 94 and 96 of 2005. APTEL vide its judgment dated 14.11.2006 had set aside the Commission's methodology of computation of Ioan on the actual repayment basis or normative repayment whichever is higher and held that the Commission is required to adopt normative debt repayment methodology for working out IoL liability order for the period 1.4.1998 to 31.3.2001. In view of the above, the interest allowed for 2004-09 tariff period is revised on the basis of the normative debt repayment methodology.





#### Re: Additional Capital Expenditure (ACE)

7. APTEL vide judgment dated 13.6.2007 in Appeal No. 139/2006 and others held that additional capitalisation after the date of commercial operation should also be considered for computation of maintenance spares. In view of the above, the maintenance spares to be considered for computation of working capital for 2004-09 period are also required to be revised taking into consideration the ACE after the date of commercial operation.

#### Re: Depreciation

- 8. As regards depreciation, APTEL in its judgement dated 13.6.2007 in Appeal No.139 of 2006 and batch matters observed that depreciation is an expense and it cannot be deployed for deemed repayment of loan and accordingly directed the Commission to compute the outstanding loan afresh. In view of the above directions of APTEL, the outstanding loan allowed for the transmission asset for the 2004-09 tariff period is revised in the instant order.
- 9. The revision of transmission tariff allowed for 2004-09 tariff period necessitates the revision of transmission tariff allowed for 2009-14 tariff period, which is also allowed in the present order. The implementation of the directions of APTEL in judgments dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters was kept pending in case of the Petitioner awaiting the outcome of the Civil Appeals filed before the Hon'ble Supreme Court. Taking into consideration the facts of the case and keeping in view the interest of the consumers, we are of the view that the beneficiaries should not be burdened with the carrying cost for the difference in the tariff allowed earlier and allowed in the instant order for 2004-09 and 2009-14 tariff periods. Therefore, we





direct that the Petitioner will neither claim nor pay any carrying cost from or to the beneficiaries for the difference, if any, in the tariff allowed earlier and the tariff being allowed in the instant order. Further, the said difference in tariff shall be recovered/paid over a period of six months from the date of issue of this order.

- 10. The hearing in this matter was held on 6.4.2021 through video conference and order was reserved.
- 11. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.
- 12. This order is issued considering the submissions made by the Petitioner in the Petition vide affidavit dated 31.7.2019, MPPMCL's reply and Petitioner's rejoinder thereto.

# Revision of transmission charges allowed for 2004-09 and 2009-14 Tariff Periods

13. MPPMCL has prayed that revision in tariff may be allowed only after prudence check. In response, the Petitioner has reiterated its submissions made in the petition and rejoinder.

#### 2004-09 Tariff Period

14. The Commission vide order dated 28.5.2008 in Petition No. 145/2007 had approved transmission charges of the transmission asset for 2004-09 period based on admitted capital cost of ₹3572.16 lakh as on 31.3.2007. The tariff of the transmission asset determined vide order dated 28.5.2008 was revised on account of ACE during 2007-08 based on admitted cost of ₹3748.12 as on 1.4.2008 vide order dated 18.6.2009 in Petition No. 56/2009. The tariff was again revised on account of ACE during 2008-09 based on admitted cost of ₹3779.9 as on 1.4.2009 vide order



dated 7.4.2010 in Petition No. 314/2009. The transmission charges approved for 2004-09 period vide order dated 7.4.2010 in Petition No. 314/2009 are as follows:

(₹ in lakh)

	2006-07		
Particulars	(pro-rata 11 months)	2007-08	2008-09
Depreciation	90.51	111.35	115.19
Return on Equity	122.98	150.75	155.09
O&M Expenses	121.65	137.95	143.53
Advance against Depreciation	0.00	0.00	0.00
Interest on Loan	163.64	193.60	191.49
Interest on Working Capital	12.55	14.77	15.22
Total	511.34	608.41	620.52

15. The Petitioner has claimed the following revised transmission charges in respect of the transmission asset for 2004-09 period in this petition:

(₹ in lakh)

	2006-07		
Particulars	(pro-rata 11 months)	2007-08	2008-09
Depreciation	90.51	111.35	115.19
Return on Equity	122.98	150.75	155.09
O&M Expenses	121.65	137.95	143.53
Advance against Depreciation	0.00	0.00	0.00
Interest on Loan	166.87	205.15	212.23
Interest on Working Capital	12.90	16.09	16.87
Total	514.92	621.28	642.91

- 16. We have considered the submissions of the Petitioner. The tariff is allowed in respect of the transmission asset on the basis of following:
  - a) Admitted capital cost of ₹2958.20 lakh as on COD for transmission asset;
  - b) ACE of ₹614.66 lakh during 2006-07 period approved vide order dated 28.5.2008 in Petition No. 145/2007; ACE of ₹175.26 lakh during 2007-08 period approved vide order dated 18.6.2009 in Petition No. 56/2009; and ACE of ₹31.78 lakh during 2008-09 period approved vide order dated 7.4.2010 in Petition No. 314/2009.





- c) Weighted Average Rate of Interest on actual loan, Weighted Average Rate of Depreciation, Rate of Interest for Working Capital and O&M Expenses as per order dated 7.4.2010 in Petition No. 314/2009.
- 17. In view of the above, the revised transmission charges allowed in respect of the transmission asset for 2004-09 tariff period are as follows:

(₹ in lakh)

Particulars	lars 2006-07 (pro-rata 11 months)		2008-09
Depreciation	90.51	111.35	115.19
Interest on Loan	122.98	150.75	155.09
Return on Equity	121.65	137.95	143.53
Interest on Working Capital	0.00	0.00	0.00
O&M Expenses	163.60	193.54	191.50
Advance against Depreciation	12.85	15.54	16.15
Total	511.59	609.13	621.46

18. The Annual Fixed Charges (AFC) allowed for 2004-09 tariff period vide order dated 7.4.2010 in Petition No. 314/2009, the revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

(₹ in lakh)

Particulars	2006-07	2007-08	2008-09
AFC approved vide order dated	511.33	608.42	620.52
7.4.2010 in Petition No. 314/2009			
AFC claimed by the Petitioner in the	514.92	621.28	642.91
instant petition			
AFC allowed in the instant order	511.59	609.13	621.46

#### 2009-14 Tariff Period

19. The Commission vide order dated 24.11.2010 in Petition No. 152/2010 approved the tariff of the transmission asset for 2009-14 period and vide order dated 7.10.2015 in Petition No. 153/TT/2014 trued up the tariff allowed for 2009-14 period and the same is as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	199.74	199.74	199.74	199.74	199.74
Return on Equity	207.76	215.37	215.58	215.58	218.18
O&M Expenses	223.66	236.46	/250.00	264.29	279.39





Interest on Loan	179.60	163.90	148.12	132.26	116.41
Interest on Working Capital	23.42	23.90	24.25	24.63	25.11
Total	834.20	839.37	837.70	836.51	838.83

20. The Petitioner has claimed the following revised transmission charges in respect of the transmission asset for 2009-14 period in the instant petition:

(₹	in	lakh)
----	----	-------

					1
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	199.74	199.74	199.74	199.74	199.74
Return on Equity	204.91	189.24	173.49	157.66	141.84
O&M Expenses	207.76	215.37	215.58	215.58	218.18
Interest on Loan	23.95	24.42	24.78	25.16	25.64
Interest on Working Capital	223.66	236.46	250.00	264.29	279.39
Total	860.02	865.23	863.59	862.43	864.79

- 21. We have considered the Petitioner's claim. The tariff is allowed in respect of the transmission asset on the basis of following:
  - a) Admitted capital cost of ₹3779.9 lakh for transmission asset as on 1.4.2009:
  - b) No ACE during 2009-14 period;
  - c) Weighted Average Rate of Interest on actual loan derived/adopted from order dated 7.10.2015 in Petition No. 153/TT/2014; and
  - d) Weighted Average Rate of Depreciation as per order 7.10.2015 in Petition No.153/TT/2014.
- 22. In view of above, the revised transmission charges allowed in respect of the transmission asset for 2009-14 tariff period are as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	199.74	199.74	199.74	199.74	199.74
Interest on Loan	179.60	163.90	148.12	132.26	116.41
Return on equity	207.76	215.37	215.58	215.58	218.18
Interest on Working Capital	23.42	23.90	24.25	24.63	25.11
O & M Expenses	223.66	236.46	250.00	264.29	279.39
Total	834.19	839.36	837.69	836.51	838.83



23. AFC allowed for 2009-14 tariff period vide order dated 7.10.2015 in Petition No. 153/TT/2014, revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
AFC approved vide order dated					
7.10.2015 in Petition No. 153/TT/2014	834.18	839.37	837.69	836.50	838.83
AFC claimed by the Petitioner in the instant petition	860.02	865.23	863.59	862.43	864.79
AFC allowed in the instant order	834.19	839.36	837.69	836.51	838.83

# Truing up of Annual Fixed Charges for 2014-19 Tariff Period

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Depreciation	199.74	199.74	199.74	199.74	199.74	
Interest on Loan	126.32	110.51	94.74	79.06	63.58	
Return on equity	218.34	219.34	219.23	219.23	219.82	
Interest on Working Capital	26.73	26.86	26.98	27.13	27.30	
O & M Expenses	257.05	265.59	274.41	283.53	292.91	
Total	828.18	822.04	815.10	808.69	803.35	

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses	21.42	22.13	22.87	23.63	24.41
Maintenance Spares	38.56	39.84	41.16	42.53	43.94
Receivables	138.03	137.01	135.85	134.78	133.89
Total	198.01	198.98	199.88	200.94	202.24
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	26.73	26.86	26.98	27.13	27.30

# Capital Cost as on 1.4.2014

26. The capital cost of the transmission asset has been calculated in accordance with Regulations 9(3) and 9(6) of the 2014 Tariff Regulations. The Commission vide order dated 7.10.2015 in Petition No. 153/TT/2014 approved the transmission tariff in



respect of the transmission asset for 2014-19 period based on admitted capital cost of ₹3779.9 lakh as on 31.3.2014. Therefore, the admitted capital cost of ₹3779.9 lakh as on 31.3.2014 has been considered for working out the trued-up tariff for 2014-19 tariff period.

# Additional Capital Expenditure (ACE)

27. The Petitioner has not claimed any ACE during 2014-19 period.

## Capital Cost considered for truing-up of tariff for 2014-19 period

28. The capital cost considered for truing-up of tariff for 2014-19 tariff period is as follows:

		(₹ in lakh)	
Capital Cost as in 1.4.2014	ACE during 2014-19 Period	Capital Cost as in 31.3.2019	
3779.9	0.00	3779.9	

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

29. The debt-equity ratio has been allowed in accordance with Regulation 19(3) of the 2014 Tariff Regulations that provides that the debt-equity ratio allowed by the Commission for determination of tariff for the period ending on 31.3.2014 shall be considered. Accordingly, the admitted debt-equity ratio of 70.57:29.43 for the period ending on 31.3.2014 has been considered as opening debt-equity ratio as on 1.4.2014 for the purpose of truing-up of tariff of 2014-19 tariff period in respect of the transmission asset. The details of the debt-equity ratio in respect of the transmission asset as on 1.4.2014 and 31.3.2019 are as follows:

Particulars	Capital cost as on 1.4.2014 (₹ in lakh)	(%)	Total cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	2667.32	70.57	2667.32	70.57
Equity	1112.58	29.43	1112.58	29.43
Total	3779.9	100.00	3779.9	100.00





#### **Depreciation**

- 30. The Petitioner has claimed depreciation considering capital expenditure of ₹3779.9 lakh as on 1.4.2014 in respect of the transmission asset. The Petitioner has not claimed any depreciation towards "IT Equipment" in the present petition.
- 31. The depreciation has been worked out as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. The Gross Block during 2014-19 tariff period with regard to the transmission asset has been depreciated at Weighted Average Rate of Depreciation (WAROD) and working of WAROD is attached as Annexure-1. WAROD has been worked out after taking into account the depreciation rates of asset as prescribed in the 2014 Tariff Regulations and depreciation allowed during 2014-19 tariff period in respect of the transmission asset is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	3779.90	3779.90	3779.90	3779.90	3779.90
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	3779.90	3779.90	3779.90	3779.90	3779.90
Average Gross Block	3779.90	3779.90	3779.90	3779.90	3779.90
Weighted average Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Balance useful life (at the beginning of the year) (Year)	24.00	23.00	22.00	21.00	20.00
Aggregate Depreciable Value	3401.91	3401.91	3401.91	3401.91	3401.91
Depreciation during the year	199.74	199.74	199.74	199.74	199.74
Cumulative Depreciation	1515.47	1715.22	1914.96	2114.71	2314.45
Remaining Aggregate Depreciable Value	1886.44	1686.69	1486.95	1287.20	1087.46

32. The details of depreciation approved vide order dated 7.10.2015 in Petition No. 153/TT/2014, depreciation claimed in the instant petition and trued-up depreciation allowed in the instant order in respect of the transmission asset are as follows:



CORPORATION OF THE PROPERTY OF

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.10.2015 in Petition No. 153/TT/2014	199.74	199.74	199.74	199.74	199.74
Claimed by the Petitioner in the instant petition	199.74	199.74	199.74	199.74	199.74
Allowed after true-up in this order	199.74	199.74	199.74	199.74	199.74

# Interest on Loan (IoL)

- 33. The Petitioner has claimed IoL based on actual interest rates for each year during 2014-19 tariff period. The Petitioner has submitted that the weighted average rate of IoL has been considered on the basis of the rates prevailing as on 1.4.2014 and has prayed to consider floating rate of interest applicable during the 2014-19 period, if any, during the truing up of tariff.
- 34. We have considered the submissions of the Petitioner and accordingly calculated IoL based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL has been worked out as follows:
  - (i) Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition.
  - (ii) The repayment for the 2014-19 tariff period has been considered to be equal to the depreciation allowed for that period.
- 35. The details of loL calculated are as follows:

(₹ in lakh)

					C III IGITIII
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	2667.32	2667.32	2667.32	2667.32	2667.32
Cumulative Repayments up to Previous Year	1315.73	1515.47	1715.22	1914.96	2114.71
Net Loan-Opening	1351.59	1151.85	952.10	752.36	552.61
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	199.74	199.74	199.74	199.74	199.74
Net Loan-Closing	1151.85	952.10	752.36	552.61	352.87
Average Loan	1251.72	1051.97	852.23	652.48	452.74
Weighted Average Rate of Interest on Loan (%)	8.052	8.072	8.103	8.154	8.260





Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan	100.79	84.92	69.05	53.21	37.40

36. The details of loL approved vide order dated 7.10.2015 in Petition No. 153/TT/2014, loL claimed by the Petitioner in the instant petition and allowed after truing up in the instant order in respect of the transmission asset is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.10.2015 in Petition No. 153/TT/2014	100.56	84.71	68.87	53.04	37.26
Claimed by the Petitioner in the instant petition	126.32	110.51	94.74	79.06	63.58
Allowed after true-up in this order	100.79	84.92	69.05	53.21	37.40

#### Return on Equity (RoE)

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

Year	Claimed effective tax rate (in %)	Grossed up RoE [(Base Rate)/(1-t)] (in %)
2014-15	21.018	19.624
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

38. MPPMCL in its reply has submitted that the Petitioner has claimed grossed up RoE on the basis of actual taxes paid during the years 2016-17 and 2017-18 and for the year 2018-19, RoE has been grossed up on the basis of applicable MAT rate, surcharge and cess and not on the basis of actual taxes paid for the year 2018-19. MPPMCL has also submitted that the Petitioner has not placed on record the assessment orders for the years 2016-17 and 2017-18 and that the Petitioner has



9



also not enclosed the audited accounts in respect of actual taxes paid for 2016-17 and 2017-18.

- 39. In response, the Petitioner has submitted that the Income Tax assessment of the Petitioner has been completed and assessment orders for years 2014-15, 2015-16 and 2016-17 have been issued by the Income Tax Department and Income Tax returns for years 2017-18 and 2018-19 have been filed. The Petitioner has further submitted that the basis of the effective tax rate and grossed-up RoE for 2014-19 tariff period has already been mentioned in the instant petition. The Petitioner has further submitted that assessment order for years 2014-15 and 2015-16 have already been submitted in Petition No. 20/TT/2020 and copy of the assessment order for the year 2016-17 is placed on record in this petition. The Petitioner has also claimed the differential tariff on account of trued-up RoE based on effective tax rate calculated on completion of Income-tax assessment/re-assessment for period 2014-19 on receipt of assessment orders directly from the beneficiaries on yearly basis as per Regulation.
- 40. We have considered the submissions of the Petitioner and MPPMCL. It is pointed out that the Commission vide order dated 2.2.2021 in Petition No. 312/TT/2020 has already dealt with the issues of MPPMCL observing that the Petitioner has submitted the assessment orders issued by the Income Tax Department for the years 2014-15, 2015-16 and 2016-17 and the Income Tax returns filed by the Petitioner for years 2017-18 and 2018-19. It was further observed by the Commission that the Petitioner has submitted the documents pointed out by MPPMCL.





- 41. In view of the above clarification of the Petitioner, the issue raised in the present petition does not require any finding.
- 42. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates and the same is as follows:

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

43. The MAT rates as allowed vide order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing-up of the tariff of 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations and the same is as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Base rate of RoE (in %)	Grossed up RoE [(Base Rate)/(1-t)] (in %)
2014-15	20.961	15.50	19.610
2015-16	21.342	15.50	19.705
2016-17	21.342	15.50	19.705
2017-18	21.342	15.50	19.705
2018-19	21.549	15.50	19.758

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

(₹ in lakh) 2016-17 2017-18 2018-19 **Particulars** 2014-15 2015-16 1112.58 1112.58 1112.58 1112.58 1112.58 Opening Equity 0.00 0.00 0.00 Addition due to ACE 0.00 0.00 1112.58 1112.58 Closing Equity 1112.58 1112.58 1112.58 1112.58 1112.58 1112.58 1112.58 1112.58 Average Equity 15.500 15.500 Return on Equity (Base Rate) (%) 15.500 15.500 15.500 21.549 21.342 21.342 21.342 Tax Rate applicable (%) 20.961 19.758 19.705 19.705 19.705 Applicable ROE Rate (%) 19.610 Return on Equity for the year 219.23 219.82 218.18 219.23 219.23





45. The details of RoE approved vide order dated 7.10.2015 in Petition No. 153/TT/2014, RoE claimed in the instant petition and trued-up RoE allowed in the instant order in respect of the transmission asset are as follows:

					(₹ in lakl
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.10.2015 in Petition No. 153/TT/2014	218.18	218.18	218.18	218.18	218.18
Claimed by the Petitioner in the instant petition	218.34	219.34	219.23	219.23	219.82
Allowed after true-up in this order	218.18	219.23	219.23	219.23	219.82

# Operation & Maintenance Expenses (O&M Expenses)

46. The O&M Expenses as claimed by the Petitioner are as follows:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	Tran	smission Li	ne		
Bhadrawati- Chandrapur (D/C twin conductor) transmission line (km)	22.42	22.42	22.42	22.42	22.42
Norms (₹ lakh/km)	0.71	0.73	0.76	0.78	0.81
O&M Transmission Line	15.85	16.39	16.93	17.49	18.07
	Sub	station Bay	S		
400 kV Bhadrawati- Chandrapur Sub-station (Number)	4	4	4.	4	4
Norms (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
O&M Sub-station	241.20	249.20	257.48	266.04	274.84
Total O&M (₹ in lakh)	257.05	265.59	274.41	283.53	292.91

47. The O&M Expenses as claimed by the Petitioner are within the norms specified under the 2014 Tariff Regulations. The O&M Expenses approved in respect of the transmission asset for 2014-19 tariff period are as follows:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	Tran	smission Li	ne	y'	
Bhadrawati-chandrapur (D/C twin conductor)	22.42	22.42	22.42	22.42	22.42





transmission line (km)					
Norms (₹ lakh/km)	0.71	0.73	0.76	0.78	0.81
O&M Transmission Line	15.85	16.39	16.93	17.49	18.07
	Sub	-station Bay	/S		
400 kV Bhadrawati- Chandrapur Sub-station (Number)	4	4	4	4	4
Norms (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
O&M Sub-station	241.20	249.20	257.48	266.04	274.84
Total O&M (₹ in lakh)	257.05	265.59	274.41	283.53	292.91

48. The details of O&M Expenses approved vide order dated 7.10.2015 in Petition No. 153/TT/2014, O&M Expenses claimed in the instant petition and trued-up O&M Expenses allowed in the instant order in respect of the transmission asset are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Approved vide order dated 7.10.2015 in Petition No. 153/TT/2014	257.05	265.59	274.41	283.53	292.91	
Claimed by the Petitioner in the instant petition	257.05	265.59	274.41	283.53	292.91	
Allowed after true-up in this order	257.05	265.59	274.41	283.53	292.91	

#### Interest on Working Capital (IWC)

The Petitioner is entitled to IWC as per Regulation 28 of the 2014 Tariff Regulations. The components of the working capital and the Petitioner's entitlement to interest thereon are discussed as follows:

#### (i) Receivables

Receivables as a component of working capital will be equivalent to two months fixed cost. The Petitioner has claimed the receivables on the basis of 2 months annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.

#### (ii) Maintenance spares





Regulation 28 of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M expenses. The value of maintenance spares has accordingly been worked out.

#### (iii) O & M expenses

Operation and maintenance expenses have been considered for one month as a component of working capital. The Petitioner has claimed O&M expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.

# (iv) Rate of interest on working capital

As per Proviso 3 of Regulation 28 of the 2014 Tariff Regulation, SBI Base rate 10.00% as on 1.4.2014 plus 350 basis points i.e. 13.50% has been considered for the asset as the rate of interest on working capital.

50. The trued-up IWC allowed in respect of the transmission asset for 2014-19 tariff period is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses (O&M Expenses for One	21.42	22.13	22.87	23.63	24.41
Month)					
Maintenance Spares	38.56	39.84	41.16	42.53	43.94
(15% of O&M)					
Receivables					
(Equivalent to two months of	133.65	132.63	131.47	130.37	129.43
annual transmission charges)					
Total Working Capital	193.63	194.60	195.50	196.53	197.77
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	26.14	26.27	26.39	26.53	26.70

51. The details of IWC approved vide order dated 7.10.2015 in Petition No. 153/TT/2014, IWC claimed in the instant petition and trued-up IWC allowed in the instant order in respect of the transmission asset is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.10.2015 in Petition No. 153/TT/2014	26.13	26.24	26.36	26.50	26.66
Claimed by the Petitioner in the instant petition	26.73	26.86	26.98	27.13	27.30







Allowed after true-up in this	26.14	26.27	26.39	26.53	26.70
order	20.14	20.21	20.39	20.55	20.70

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

52. Accordingly, the annual fixed charges after truing-up in respect of the transmission asset for 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017–18	2018-19
Depreciation	199.74	199.74	199.74	199.74	199.74
Interest on Loan	100.79	84.92	69.05	53.21	37.40
Return on Equity	218.18	219.23	219.23	219.23	219.82
Interest on Working Capital	26.14	26.27	26.39	26.53	26.70
O&M Expenses	257.05	265.59	274.41	283.53	292.91
Total	801.90	795.76	788.83	782.24	776.57

53. The details of Annual transmission charges approved vide order dated 7.10.2015 in Petition No. 153/TT/2014, annual transmission charges claimed in the instant petition and trued-up annual transmission charges allowed in the instant order in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 7.10.2015 in Petition No. 153/TT/2014	801.66	794.46	787.56	780.99	774.75
Claimed by the Petitioner in the instant petition	828.18	822.04	815.10	808.69	803.35
Allowed after true-up in this order	801.90	795.76	788.83	782.24	776.57

# **Determination of Annual Fixed Charges for 2019-24 Tariff Period**

54. The Petitioner has claimed the following transmission charges for 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	57.24	57.24	57.24	57.24	57.24
Interest on Loan	53.86	50.17	49.89	44.47	39.05
Return on equity	219.82	219.82	219.82	219.82	219.82
Interest on Working Capital	11.55	11.75	11.98	12.14	12.29







O & M Expenses	150.95	156.17	161.56	167.14	172.91
Total	493.42	495.15	500.49	500.81	501.31

# 55. The details of IWC claimed by the Petitioner is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	12.58	13.01	13.46	13.93	14.41
Maintenance Spares	22.64	23.43	24.23	25.07	25.94
Receivables	60.67	61.05	61.70	61.74	61.64
Total	95.89	97.49	99.39	100.74	101.99
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest	11.55	11.75	11.98	12.14	12.29

## **Capital Cost**

- 56. Regulation 19 of the 2019 Tariff Regulations provides as follows:
  - "(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 up to 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;
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."
- (4) The capital cost in case of existing or new hydro generating station shall also include:
- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (5) The following shall be excluded from the capital cost of the existing and new projects:
- (a) The asset forming part of the project, but not in use, as declared in the tariff petition;
- (b) De-capitalised Asset after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment. "
- 57. The capital cost of ₹3779.9 lakh has been considered by the Commission for the transmission asset as on 31.3.2019. Therefore, the capital cost of ₹3779.9 lakh as on 31.3.2019 has been considered as the opening capital cost as on 1.4.2019 for the purpose of determination of transmission tariff for 2019-24 period in accordance with Regulation 19 of the 2019 Tariff Regulations.

# **Additional Capital Expenditure (ACE)**

58. The Petitioner has not claimed any ACE for 2019-24 tariff period in respect of the transmission asset.

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

- 59. Regulation 18 of the 2019 Tariff Regulations provides as follows:
  - "18. Debt-Equity Ratio: (1) For new projects, the debt: equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

#### Provided that:

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

Explanation.-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of

Order in Petition No. 304/TT/2019

Page 27 of 45

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."
- 60. The debt-equity ratio for 2019-24 period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The details of the debt-equity ratio considered for the purpose of tariff for 2019-24 tariff period is as follows:

Particulars	Capital cost as on 1.4.2019 ুু(₹ in lakh)	(%)	Total cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	2667.32	70.57	2667.32	70.57
Equity	1112.58	29.43	1112.58	29.43
Total	3779.9	100.00	3779.9	100.00





#### **Depreciation**

- 61. 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 asset 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 asset 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 up to 31.3.2019 from the gross depreciable value of the asset.
- (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 asset 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."
- 62. We have considered the submissions of the Petitioner. WAROD has been worked out and placed at Annexure-2 after taking into account the depreciation rates as prescribed in the 2019 Tariff Regulations. The transmission asset has already completed 12 years of life as on 31.3.2019 and, therefore, the remaining depreciable value of ₹1087.46 lakh has been spread across the balance useful life of 19 years in accordance with Regulation 33(5) of the 2019 Tariff Regulations. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed in respect of the transmission asset is as follows:

/=	2	10	kh	١
100	463	1124	BK II II	1

					( III Ididii)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	3779.90	3779.90	3779.90	3779.90	3779.90
Addition during 2019-24 due to projected ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	3779.90	3779.90	3779.90	3779.90	3779.90
Average Gross Block	3779.90	3779.90	3779.90	3779.90	3779.90
Balance useful life at the beginning of the year (Year)	19	18	17	16	15
Depreciable Value	3401.91	3401.91	3401.91	3401.91	3401.91
Rate of Depreciation (%)	1.514	1.514	1.514	1.514	1.514
Depreciation during the year	57.23	57.23	57.23	57.23	57.23





Cumulative Depreciation	2371.69	2428.92	2486.16	2543.39	2600.63
Remaining Depreciable Value at the end of the					
year	1030.22	972.99	915.75	858.52	801.28

# Interest on Loan (IoL)

- 63. Regulation 32 of the 2019 Tariff Regulations provides as follows:
  - "32.Interest on loan capital: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.
  - (2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.
  - (3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case ofde-capitalization of asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to 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.

(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.





- (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".
- 64. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. The floating rate of interest, if any, shall be considered at the time of true up. Accordingly, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	2667.32	2667.32	2667.32	2667.32	2667.32
Cumulative Repayments up to Previous Year	2314.45	2371.69	2428.92	2486.16	2543.39
Net Loan-Opening	352.87	295.63	238.40	181.16	123.93
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	57.23	57.23	57.23	57.23	57.23
Net Loan-Closing	295.63	238.40	181.16	123.93	66.69
Average Loan	324.25	267.02	209.78	152.55	95.31
Weighted Average Rate of Interest on Loan (%)	8.399	8.589	9.470	9.470	9.470
Interest on Loan	27.23	22.93	19.87	14.45	9.03

#### Return on Equity (RoE)

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

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."

- "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 follows:

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

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

#### Illustration-

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

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





- (ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:
  - (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
  - (b) Estimated Advance Tax for the year on above is Rs 240 crore;
  - (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%
  - (d) Rate of return on equity = 15.50/ (1-0.24) = 20.395%
- (3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis."
- 66. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. We have considered the submissions of the Petitioner. Accordingly, the MAT rate applicable in 2019-20 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 asset under Regulation 30 of the 2019 Tariff Regulations is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	1112.58	1112.58	1112.58	1112.58	1112.58
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	1112.58	1112.58	1112.58	1112.58	1112.58
Average Equity	1112.58	1112.58	1112.58	1112.58	1112.58
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	208.96	208.96	208.96	208.96	208.96

# Operation & Maintenance Expenses (O&M Expenses)

67. Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations specify the norms for O&M Expenses for the transmission system and the same is as follows:



Marcial Marcial Oct Inches

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

Particulars	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24
Norms for sub-station Bays (₹ Lakh per b	ay)				
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	1)				
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ lakh pe	r km)				
Single Circuit (Bundled Conductor with six or more	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more	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	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.

- (4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up."
- 68. The O&M Expenses claimed by the Petitioner in respect of the transmission asset are as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Trans	mission Lin	е		
Bhadrawati-Chandrapur(D/C twin conductor) transmission	22.42	22.42	22.42	22.42	22.42







line (km)					
Norms (₹ lakh/km)	0.88	0.91	0.94	0.98	1.01
O&M Transmission Line	19.75	20.45	21.16	21.90	22.67
	Sub-s	tation Bays			
400 kV Bhadrawati-chandrapur Sub-station (Number)	4	4	4	4	4
Norms (₹ lakh/bay)	32.15	33.28	34.45	35.66	36.91
O&M Substation	128.60	133.12	137.80	142.64	147.64
	Commur	nication sys	tem		
PLCC(₹ in lakh)	129.79	129.79	129.79	129.79	129.79
Norms (%)	2	2	2	2	2
O&M communication system	2.60	2.60	2.60	2.60	2.60
Total O&M (₹ in lakh)	150.95	156.16	161.56	167.14	172.90

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

# 70. The O&M Expenses approved in respect of the transmission asset for 2019-24 tariff period are as follows:

(₹ in lakh) 2023-24 2022-23 **Particulars** 2019-20 2020-21 2021-22 **Transmission Line** 22.42 22.42 22.42 22.42 22.42 Bhadrawati-Chanderpur D/C twin conductor (km) 0.98 1.01 Norms (₹ lakh/km) 0.88 0.91 0.94 21.90 22.67 20.45 21.16 **O&M Transmission Line** 19.75 **Sub-station Bays** Number of 400 kV 4 4





Bhadrawati Chanderpur Sub-station					
Norms (₹ lakh/bay)	32.15	33.28	34.45	35.66	36.91
O&M Sub-station	128.60	133.12	137.80	142.64	147.64
Total O&M (₹ in lakh)	148.35	153.57	158.96	164.54	170.31

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

71. Regulations 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)...
- (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
  - i. Receivables equivalent to 45 days of 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 ...
- (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;"
- 72. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of interest on working capital as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) on working capital considered is 12.05% (SBI 1 year MCLR applicable as on



1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas, Rol for 2020-21 onwards has been considered as 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points). The components of the working capital and interest thereon allowed for the instant asset is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M Expenses for one Month)	12.36	12.80	13.25	13.71	14.19
Maintenance Spares (15% of O&M)	22.25	23.04	23.84	24.68	25.55
Receivables (Equivalent to two months of annual transmission charges)	55.66	55.85	56.16	56.20	56.10
Total Working Capital	90.27	91.68	93.25	94.59	95.84
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest of working capital	10.88	10.31	10.49	10.64	10.78

# Annual Fixed Charges for 2019-24 Tariff Period

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	57.23	57.23	57.23	57.23	57.23
Interest on Loan	27.23	22.93	19.87	14.45	9.03
Return on Equity	208.96	208.96	208.96	208.96	208.96
Int. on Working Capital	10.88	10.31	10.49	10.64	10.78
Operation and Maintenance Expenses	148.35	153.57	158.96	164.54	170.31
Total	452.66	453.02	455.52	455.83	456.31

# Filing Fee and Publication Expenses

74. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. Regulation 70(1) of the 2019 Tariff Regulations provides for reimbursement of filing fees and publication paid by the Petitioner. Accordingly, the Petitioner is entitled for reimbursement of the filing fees and publication expenses





in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

#### Licence Fee & RLDC Fees and Charges

75. The Petitioner has sought reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 2019-24 period. The Petitioner has also sought reimbursement of RLDC fee and charges in accordance with Regulation 70(3) of the 2019 Tariff Regulations for 2019-24 tariff period. The Petitioner shall be entitled to Licence Fee and RLDC Fees and Charges in terms of 2019 Tariff Regulations.

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

- 76. The Petitioner has submitted that if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, paid by the Petitioner on account of demand from Government/Statutory authorities, may be allowed to be recovered from the beneficiaries.
- 77. We have considered the submissions of the Petitioner. Since GST is not levied on transmission service at present, we are of the view that Petitioner's prayer is premature.

#### **Security Expenses**

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

Order in Petition No. 304/TT/2019

Page 40 of 45

2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on an yearly basis.

79. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission assets in one petition. It is observed that the Petitioner has already filed Petition No. 260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

#### **Capital Spares**

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

#### **Sharing of Transmission Charges**

81. During the tariff periods 2004-09 and 2009-14 (upto to 30.6.2011), the transmission charges for inter-State transmission systems were being shared in accordance with the Tariff Regulations for the respective tariff periods. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission system

Order in Petition No. 304/TT/2019

TORPORATION OF THE PROPERTY OF

was governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2010. With effect from 1.11.2020, sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (in short, "the 2020 Sharing Regulations"). Accordingly, the liabilities of DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations. For subsequent period, the billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

#### 82. To summarise:

a. The revised annual fixed charges allowed in respect of the transmission asset for 2004-09 tariff period as per the APTEL's judgements are:

	(₹ in la			
Particulars	2006-07 ( <i>pro-rata</i> 11 months)	2007-08	2008-09	
AFC	511.59	609.13	621.46	

b. The consequential revision of annual fixed charges allowed in respect of the transmission asset for 2009-14 tariff period are:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
AFC	834.19	839.36	837.69	836.51	838.83

c. The trued-up annual fixed charges allowed in respect of the transmission asset for 2014-19 tariff period are as follows:

					/ Thi landing
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	801.90	795.76	788.83	782.24	776.57
			/ (2)		

°Order in Petition No. 304/TŢ/2019



Page **42** of **45** 

(₹ in lakh)

d. The Annual Fixed Charges allowed in respect of the transmission asset for 2019-24 tariff period in this order are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	452.66	453.02	455.52	455.83	456.31

- 83. Annexure-I and Annexure-II given hereinafter form part of the order.
- 84. This order disposes of Petition No. 304/TT/2019 in terms of the above discussions and findings.

sd/- sd/- sd (Pravas Kumar Singh) (Arun Goyal) (I.S. Member Member Mem

sd/-(I.S. Jha) Member sd/-(P. K. Pujari) Chairperson



_
19
20
È
4
30
0
Ž
on
#
Pe
7
ğ
0
2
1

		Admitted Capital Cost as	Admitted Capital Cost as	Rate of	7	Annual Depreciation as per Regulations (₹ in lakh)	ciation as per (₹ in lakh)	r Regulations	
Asset	Гапсшаг	on 1.4.2014 (₹ in lakh)	on 31.3.2019 (₹ in lakh)	Depreciation (%)	2014-15	2015-16	2016-17	2017-18	2018-19
	Land	00.00	00.00	00.00					
	Building	61.70	61.70	3.34					
	Transmission								
Asset	Line	2170.16	2170.16	5.28					
	Sub Station	1418.25	1418.25	5.28					
	PLCC	129.79	129.79	6.33					
4	TOTAL	3779.9	3779.9		199.74	199.74	199.74	199.74	199.74
			Average Gross Block (₹ in lakh)	lock (₹ in lakh)	3779.90	3779.90	3779.90	3779.90	3779.90
			Weighted Average Rate of	je Rate of	000	o C	20	000	900
•			Depreciation (%)		07.0	07.0	07.0	07.0	07.0

Annexure-I



0
<u></u>
5
$\mathcal{O}$
È
4
8
$\approx$
<u>o</u>
Z
ō
:Ξ
爱
Ψ
ш
_⊑
_
ē
Ō

		Admitted Capital Cost as on	Admitted Capital Admitted Capital Cost as on Cost as on	Rate of		Annual Depre	Annual Depreciation as per Regulations (₹ in lakh)	r Regulations	
Asset	Farticular	31.3.2019 (₹ in lakh)	31.3.2024 (₹ in lakh)	(%)	2019-20	2020-21	2021-22	2022-23	2023-24
	Land	00.00	00.00	00.00					
	Building	61.70	61.70	2.63					
, oo v	Transmission	2170 16	2170.16	1.40					
73361	Sub Station	1418.25	1418.25	1.40					
	PLCC	129.79	129.79	0.74					
	TOTAL	3779.9	3779.9		57.23	57.23	57.23	57.23	57.23
			Average Gross Block (₹ in lakh)	ock (₹ in lakh)	3779.90	3779.90	3779.90	3779.90	3779.90
= 5 <sub>6</sub>	ď		Weighted Average Rate of Depreciation (%)	Rate of	1.514	1.514	1.514	1.514	1.514

Annexure-II



Name of the	Fransmission Licensee:	Power Grid Corpora	ation of India Limited	1	
Project	BHADRAWATI CHANE	ERPUR			
Element Description	BHADRAWATI CHAND	ERPUR			
Region	Western Region		DOCO Date	May 1, 2006	

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Year Days	366.00	365.00	365.00	365.00	366.00
Tariff Days	366.00	365.00	365.00	365.00	366.00
Depreciation-Form No. 10A	57.24	57.24	57.24	57.24	57.23
Interest on Loan-Form No. 9E	27.23	22.93	19.87	14.44	9.02
Return on Equity-Form No. 8	208.96	208.96	208.96	208.96	208.96
Int. on Working capital-Form No.11	10.88	10.32	9.78	9.92	11.51
Op. and maintenance-Form No.2	148.35	153.57	158.96	164.54	170.31
Total AFC	452.66	453.02	454.81	455.10	457.03

## Summary of Asset Level Cost

Name of the Tra	Name of the Transmission Licensee   Power Grid Corporation of India Limited		
Project	BHADRAWATI CHANDERPUR		
Element Description	BHADRAWATI CHANDERPUR		
Region	Western Region	DOCO Date   May 1, 2006	May 1, 2006

A) Summary of Capital Cost, Means of Finance of the Asset

I) Apportioned Approved Cost	i) Apportioned Approved Cost	tioned d Cost		ii) Summary of Actual / Projected Capital Expenditure incurred	of Actual /	Projected C	apital Expe	nditure inc	nrred
Particular	As Per IA	As per RCE	As on COD / 01.04.2019	2019-20	2020-21	2021-22	2022-23	2023-24	As on 31.03.2024
Land (Freehold Land)	00.00	00.00	00.00	0.00	0.00	00.00	00.00	00.00	0.00
Building & Civil Works	00.00	00.00	61.70	00.00	0.00	0.00	00.00	00.00	61.70
Transmission Lines	00.00	00.00	2,170.16	0.00	0.00	00.00	00.00	00.00	2,170.16
Substations	00.00	00'0	1,418.25	00.00	0.00	0.00	0.00	00.00	1,418.25
Comm. Sys. excluding Fiber Optic	00.00	00.00	129.79	00.00	0.00	0.00	0.00	00.00	129.79
Land (Leasehold)	00.00	0.00	00.00	00.0	0.00	0.00	0.00	00.0	00.00
IT/Software/UNMS/URTDSM/	00.00	00.00	00.00	00.0	0.00	00.0	0.00	00.0	0.00
Batteries	00.00	00.00	00.00	0.00	0.00	0.00	0.00	00.0	00.00
Fiber Optic/OPGW	00.00	00.00	00.00	0.00	0.00	00.0	0.00	00.00	00.0
Total Capital Cost as per Books	00.00	0.00	3,779.90	00.00	0.00	00.0	0.00	00.00	3,779.90
Less: Liability	00.00	00'0	00.00	00'0	0.00	0.00	0.00	00.00	00.0
Action of liability	00'0	00'0	00.00	00'0	00.00	0.00	0.00	00.00	00.0
No cap During Year As per Books	00'0	00'0	00.00	0.00	0.00	00.00	00'0	00.00	00.00
Total Capital incurred	00.00	00'0	3,779.90	00.00	0.00	0.00	0.00	00.00	3,779.90
Egety	00'0	00'0	1,112.58	0.00	00.00	00.00	00.00	00.00	1,112.58
Dect	00.00	0.00	2,667.32	00.0	0.00	0.00	0.00	0.00	2,667.32



# 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 Tra	Name of the Transmission Licensee   Power Grid Corporation of India Limited		
Project	BHADRAWATI CHANDERPUR		
Element Description	BHADRAWATI CHANDERPUR		
Region	Western Region	DOCO Date	May 1, 2006

1. Transmission Lines

								(Amount in Rs. Lakh)	n Rs. Lakh	
Name of Line	Type of Line AC/	S/C or D/C	S/C or No of Sub- Voltage Line D/C Conductors Level Bays	Voltage Level	Line	Line Reactor (Including	Line Lenath	or Line Date of	Covere pre: peti	Covered in the present petition lf No.
	HVDC		Z.	\$		Switchable Reactor)	Km	operation	Petition No.	Petition No.
BHADRAWATI CHANDERPUR	AC	DC	2	400 KV	400 KV 0.000 0.000	0.000	22.420	22.420 May 1, 2006	>	

Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
DOUBLE CIRCUIT (TWIN CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.881	0.912	0.944	0.977	1.011
ROWER GAO Units - ( Length in KM )	22.42	22.42	22.42	22.42	22.42

22.67

21.90

21.16

20.45

19.75

O&M Claimed

	Type of Voltage	Voltage	No. of Transfor ms/		Š	No. of Bays		2	IVA/MV	MVA/MVAR Capacity	acity	30	S = F	Covered in the present
Name of Sub-station	Substation	Level		765 KV	60 ₹ ₹	220 KV	132 RV	765 KV	400 X	220 KV	₹ ₹	Comm.	N N N	f No,
Bhadrawati:BHADRAWATHI CHANDRAPUR	Conventio	400 KV			2.000							May 1, 2006 Y	>	
Chandrapur:BHADRAWATHI CHANDRAPUR(MSEB)	Conventio	400 KV			2.000							May 1, 2006 Y	>	

Summary:

O&M Expenses For Substations Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
400KV SUB-STATION					
Normative Rate of O&M as per Regulation	32.15	33.28	34.45	35.66	36.91
No. of Units	4.00	4.00	4.00	4.00	4.00
O&M Claimed	128.60	133.12	137.80	142.64	147.64





Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M					
Transmission Line	19.75	20.45	21.16	21.90	22.67
Substation	128.60	133.12	137.80	142.64	147.64
Communication System	00.00	00.00	0.00	00.00	0.00
Total Normative O&M	148.35	153.57	158.96	164.54	170.31
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through as separate Petition )					
*Security Expenses	00.00	00.0	0.00	00.00	0.00
*Actual Capital Spare consumed	00.0	00.00	0.00	0.00	0.00
nsurance Premium Paid	00.00	00.00	00.00	00.00	0.00
Total O&M	148.35	153.57	158.96	164.54	170.31



## Normative parameters considered for tariff computations

Name of the T	Fransmission Licensee	Power Grid Corpora	tion of India Limite	ed			
Project	BHADRAWATI CHANDE	RPUR					
Element Description	BHADRAWATI CHANDE	BHADRAWATI CHANDERPUR					
Region	Western Region		DOCO Date	May 1, 2006			

(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)		1				
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	POR 0.578

Page 1 of 2

0322001 : Truing Up: BHADRAWATI CHANDERPUR

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	,					1
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	RP2,942.00

# Abstract of existing transmission assets/elements under Project, Determination of Effective COD and Form No. -4 weighted Average life for single AFC for the project as whole

Name of the T	Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	BHADRAWATI CHANDERPUR	ERPUR		
Element Description	BHADRAWATI CHANDERPUR	ERPUR		
Region	Western Region		DOCO Date	May 1, 2006

A) Details of All the Asset Covered under the Scope of the Project

|--|

B) Details as on 01.04.2019 for determination of Single Tariff for the Project Commissioned prior to 01.04.2019

C) Computation of Effective COD for determining lapsed useful life of the project as whole

D) Weighted Average useful Life of the Project as whole

E) Lapsed Weighted average useful life of the project & Balance weighted average Useful life

1) Effective COD	
2) Last date of the previous tariff control period	Mar 31, 2019
3) No. of Completed years lapsed as on 01.04.2019 (2) - (1)	12



## Statement of Capital cost

Name of the Tr	Name of the Transmission Licensee Power Grid Corporation of India Limited		
Project	BHADRAWATI CHANDERPUR		
Element Description	BHADRAWATI CHANDERPUR		
Region	Western Region	DOCO Date	May 1, 2006

A) Capital Cost

. 4

		(Amount in Rs. Lakh)	h)
Particular	Accrual Basis	Un-discharged	Cash Basis
As on relevant date :2019-20		Liabilities	
a) Opening Gross Block Amount as per books	3 779 90	000	
Amount of the Property of the	000	00.0	08.877.6
Annount of (I) IDC (II) FC (III) FERV & (IV) Hedging cost included in A(a) above	0.00	00.00	000
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	00.00	00 0	
			200
(			
a) Addition in Gross Block Amount during the period	0.00	000	000
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B/2) above			000
e de la propieta del la propieta de la propieta del la propieta de	0.00	0.00	00.0
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	000	000
d) De-cap in gross block amount during the year	4		9
	00.00	00.0	00.00
			- FILL

a) Closing Gross Block Amount as per books	3 779 90	
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	00.00	
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	000	

0.00

0.00

0.00

3,779.90

0.00 0.00 0.00

-21
2020-
20
fe
da
Ħ
₽\é
relevan
E O
As
*

a) Opening Gross Block Amount as per books	3.779.90	0 00 2 2 7 20 00
		00:00
b) Amount of (I) IDC (II) FC (III) FERV & (iv) Hedging cost included in A(a) above	00.00	00000
		100 N
Page 1 of 4 oszzon : Truin	0322001 : Truing Up: BHADRAWATI CHANDERPUR	R
		PC d
		RS AND

c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	000	000	(
	00.00	0.00	0.00
a) Addition in Gross Block Amount during the period	00 0	000	
b) Amount of (i) IDC (ii) FFDV 6 (ii) 11:4:4:	2000	0.00	0.00
2) The control (I) IDC (II) FERV & (IV) Hedging cost included in B(a) above	0.00	00 0	000
c) Amount of IEDC (excluding IDC FC FFRV & Hadging cost) included in Blay about			0.0
and (a) another than the state of the state	0.00	00.0	00.0
d) De-cap in gross block amount during the year	0000		0
	0000	0.00	0.00
a) Closing Gross Block Amount as per books	3.779.90	00 0	3 770 00
h) Δποιπέ οξ (i) 100 (ii) C (ii) (ii) (ii) (ii) (ii) (ii) (i		00.0	0,779.90
// Constant of (1) FC (11) FERV & (1V) Hedding cost included in C(2) above	000	400	

a) Addition in Gross Block Amount during the period	00.00	0.00	00.0
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	000
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	00.00	0.00	00.00
a) Closing Gross Block Amount as per books	0000		
LV A	3,779.90	0.00	3,779.90
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	0.00	0.00	000
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	0.00	00.0	000
			20.0
As on relevant date :2021-22			
a) Opening Gross Block Amount as per books	3 770 00	0	
h) A man and a 6 (i) 100 (ii) m mmm (ii) m	0.877.0	0.00	3,779.90
b) Annount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	0.00	0.00	000
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	00.00	000	00.0

a) Addition in Gross Block Amount during the period	0.00	00 0	000
(h) Amount of (i) IDC (ii) CTD1 (ii) CT (ii) CTD1		00:0	0.00
b) Annount Of (1) IDC (11) FERV & (1V) Hedging cost included in B(a) above	00.00	000	000
Amount of IEDO (construction) of the second of		99.5	0.00
C) Aniount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	000	000	000
	0000	00.0	0.00
u) De-cap in gross block amount during the year	000	000	000
	20.0	00.0	00.0

	0 00 3 779 90		000		000	
	3,779.90		0.00		0.00	
Closing Gross Block Amount on now hooks	Sylvania Gross Diock Artificial as per Dooks	b) Amount of (i) IDC (ii) FFD(v o visit in	(ii) LC (iii) LERV & (iv) Hedging cost included in C(a) above	c) Amount of IEDC (aveluding 100 EC EEDW) 9 11-1-11-11	Comment of the comment of the control of the contro	

As on relevant date :2022-23		
a) Opening Gross Block Amount as per books	00 011	
	3,779.90	0.0
b) Amount of (I) IDC (II) FC (III) FERV & (iv) Hedging cost included in A(a) above	0.00	0
Amount of IED / /overladia and respective or a second of		2
9) remode the Carolading IDC, FC, FERV & Hedging cost) included in A(a) above	0.00	0 0

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	0.00	0.00	000
			)
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	00.00	0.00

a) Closing Gross Block Amount as per books	3,779.90	00.00	3,779.90
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	0.00	00.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	0.00	0.00	00.00

As on relevant date :2023-24			
a) Opening Gross Block Amount as per books	3,779.90	0.00	3.779.90
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	0.00	00.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	00.00	0.00	0.00

a) Addition in Gross Block Amount during the period	00.00	00.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	00.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	000	000
			9
d) De-cap in gross block amount during the vear	000	000	000
	20.0	20.50	00.0

a) Closing Gross Block Amount as per books	3,779.90	0.00	3,779.90
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	0.00	0.00	0.00

Asset
the /
for
<b>ility</b>
Fliat
ĭo ∧
윤
B

B) Flow of liability for the Asset							(Amount	Amount in Rs. Lakh)	
Particular									
Opening balance of liability	00.00	0.00	0.00	0.00	0.00	00.00	00.00	00.00	0.00
Add: Liability from ACE	00.00	0.00	0.00	0.00	0.00	00.00	00.00	00.00	WALER C.

Page 3 of 4

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



## Details of all the assets covered in the project

Name of the Tra	Name of the Transmission Licensee Power Grid	Power Grid Corporation of India Limited	a Limited	
Project	BHADRAWATI CHANDERPUR			
Element Description	BHADRAWATI CHANDERPUR			
Region	Western Region	DOCO Date	May 1, 2006	scop



Page 1 of 1 0322001 : Truing Up: BHADRAWATI CHANDERPUR

Name of the T	ransmission Licensee	Power Grid Corporation	on of India Limited	
Project	BHADRAWATI CHAN	DERPUR		
Element Description	BHADRAWATI CHAN	DERPUR		
Region	Western Region		DOCO Date	May 1, 2006

	Financial F Appro	ackage as	Financial 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	0.00		0.00	INR	2,667.32
	A 19					
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	0.00		0.00	INR	1,112.57
Total Equity	INR	0.00		0.00	INR	1,112.57
		•		**************************************	•	
Debt Equity Ratio					71:29	
Total Cost	INR	0.00		0.00	· INR	3,779.89

Particulars	Debt	Equity	Total	
Addcap for 2019 - 2020			0.00	
Addcap for 2020 - 2021			0.00	
Addcap for 2021 - 2022		1	0.00	ORPORA
Addcap for 2022 - 2023			0.00	

Page 1 of 2 -

ruing Up: BHADRAWATI CHANDERPUF

Addcap for 2023 - 2024	0.0	00

Particulars	Actual	Normative	
Addcap for 2019 - 2020			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2020 - 2021			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2021 - 2022			
Equity		0.00	T
Debt		0.00	
Total		0.00	
Addcap for 2022 - 2023			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2023 - 2024			
Equity		0.00	
Debt		0.00	
Total		0.00	
Total Capital cost with Addcap		3,779.89	CORPO

Name of the T	Fransmission Licensee	Power Grid Corporat	ion of India Limited	
Project	BHADRAWATI CHANDE	ERPUR		
Element Description	BHADRAWATI CHANDE	ERPUR		
Region	Western Region		DOCO Date	May 1, 2006

	Addition into Gross Block as	De-Cap into Gross Block as	Less	s: Deducti tow	ons dr.	the year	Add: Discharge of	ACE on cash	Admitte d Cost in
Particulars	per books of Account during the year (2)	per books of Account during the year	Grants Receiv ed (if any) (3)	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 :2019-20 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2020-21 (Actual/Projected)	¥			-					

Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2021-22 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	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
		Page 2 o	f 3	0000004	. <b>T</b> i U <b>S</b>	SHADRAWATI CHAND	EDDI ID	S Salass	10

0322001 : Truing Up: BHADRAWATI CHANDERPUR

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 :2023-24 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	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	30 EO	ODO

## Financing of Additional Capitalisation

Name of the Tr	Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	BHADRAWATI CHANDERPUR	ERPUR		
Element Description	BHADRAWATI CHANDERPUR	ERPUR		
Region	Western Region		DOCO Date	May 1, 2006

								(Amo	(Amount in Rs. Lakh)	<u>د</u>
		4	Actual/Projected	ected				Admitted		
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
Amount capitilized in Work/ Equipment										
Financing Details										
Total Loan	00.00	0.00	0.00	00.00	0.00					
Equity	00.00	0.00	00:00	00.0	0.00					
Total	00.00	00'0	00.00	00.00	00.00					NER GA
									1	S S S S S S S S S S S S S S S S S S S

92

Name of the	Transmission Licensee	Power Grid Corporation	on of India Limited	
Project	BHADRAWATI CHAND	ERPUR		
Element Description	BHADRAWATI CHAND	ERPUR		
Region	Western Region		DOCO Date	May 1, 2006

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the year	366.00	365.00	365.00	365.00	366.00
No. of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
Opening Normative Equity	1,112.57	1,112.57	1,112.57	1,112.57	1,112.57
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)	1,112.57	1,112.57	1,112.57	1,112.57	1,112.57
Add: Increase in Equity due to addition during the year / period	0.00	0.00	0.00	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	0.00	0.00	0.00	0.00
Closing Normative Equity	1,112.57	1,112.57	1,112.57	1,112.57	1,112.57
Average Normative Equity	1,112.57	1,112.57	1,112.57	1,112.57	1,112.57
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 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	208.96	208.96	208.96	208.96	ORP 208.96
Pro rata return on Equity	208.96	208.96	208.96	208.96	208.96

Name of the Tr	ansmission Licensee	Power Grid Corporation	on of India Limited	
Project	BHADRAWATI CHAND	ERPUR		
Element Description	BHADRAWATI CHAND	ERPUR		
Region	Western Region		DOCO Date	May 1, 2006

(Amount in Rs. Lakh) **Particulars** 2019-20 2020-21 2021-22 2022-23 2023-24 **BOND XVII -DOCO DRAWL ON 01-MAY** Gross Loan- Opening 711.00 711.00 711.00 711.00 711.00 Cumulative repayments of Loans upto 711.00 711.00 711.00 711.00 711.00 previous year 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 0.00 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 0.00 Average Net Loan 0.00 0.00 0.00 0.00 0.00 Rate of Interest on Loan on Annual Basis 7.39 7.39 7.39 7.39 7.39 Interest on loan 0.00 0.00 0.00 0.00 0.00

BOND XVIII -DOCO DRAWL ON 01-MAY					
Gross Loan- Opening	1,383.00	1,383.00	1,383.00	1,383.00	1,383.00
Cumulative repayments of Loans upto previous year	1,152.50	1,267.75	1,383.00	1,383.00	1,383.00
Net loan-Opening	230.50	115.25	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	115.25	115.25	0.00	0.00	0.00
Net Loan-Closing	115.25	0.00	0.00	0.00	O.00

Average Net Loan	172.88	57.63	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	14.0897	4.6968	0.00	0.00	0.00

BOND XXVII -DOCO DRAWL ON 01-MAY					
Gross Loan- Opening	138.00	138.00	138.00	138.00	138.00
Cumulative repayments of Loans upto previous year	92.00	103.50	115.00	126.50	138.00
Net loan-Opening	46.00	34.50	23.00	11.50	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	11.50	11.50	11.50	11.50	0.00
Net Loan-Closing	34.50	23.00	11.50	0.00	0.00
Average Net Loan	40.25	28.75	17.25	5.75	0.00
Rate of Interest on Loan on Annual Basis	9.47	9.47	9.47	9.47	9.47
Interest on loan	3.8117	2.7226	1.6336	0.5445	0.00

## Summary

Gross Loan- Opening	2,232.00	2,232.00	2,232.00	2,232.00	2,232.00
Cumulative repayments of Loans upto previous year	1,955.50	2,082.25	2,209.00	2,220.50	2,232.00
Net loan-Opening	276.50	149.75	23.00	11.50	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	126.75	126.75	11.50	11.50	0.00
Net Loan-Closing	149.75	23.00	11.50	0.00	0.00
Average Net Loan	213.13	86.38	17.25	5.75	0.00
Rate of Interest on Loan on Annual Basis	8.3993	8.5893	9.4701	9.4696	9.4696
nterest on loan	17.9014	7.4194	1.6336	0.5445	0.00

Page 2 of 3

0322001 : Truing Up: BHADRAWATI CHANDERPUR

(Petitioner)



96

Page 3 of 3 0322001 : Truing Up: BHADRAWATI CHANDERPUR

## Loans in Foreign Currency

Form No. - 9D

Name of the	Fransmission Licensee	Power Grid Corporation	on of India Limited	I	
Project	BHADRAWATI CHAND	ERPUR			
Element Description	BHADRAWATI CHAND	ERPUR			
Region	Western Region		DOCO Date	May 1, 2006	

### **Calculation of interest on Normative Ioan**

Form No. - 9E

Name of the Tr	ransmission Licensee	Power Grid Corporation	on of India Limited	
Project	BHADRAWATI CHAND	ERPUR		
Element Description	BHADRAWATI CHANDI	ERPUR		
Region	Western Region		DOCO Date	May 1, 2006

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the Year	366.00	365.00	365.00	365.00	366.00
No. of days for which Tariff claimed	366.00	365.00	365.00	365.00	366.00
Gross normative loan-Opening	2,667.32	2,667.32	2,667.32	2,667.32	2,667.32
Cumulative repayments of Normative loan upto previous year	2,314.45	2,371.69	2,428.93	2,486.17	2,543.41
Net normative loan-Opening	352.87	295.63	238.39	181.15	123.91
Addition in normative loan towards the ACE	0.00	0.00	0.00	0.00	0.00
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	57.24	57.24	57.24	57.24	57.23
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	295.63	238.39	181.15	123.91	66.68
Average normative loan	324.25	267.01	209.77	152.53	95.30
Weighted Average Rate of interest on actual loan	8.3993	8.5893	9.4701	9.4696	9.4696
Interest on normative loan	27.23	22.93	19.87	14.44	9.02
Pro rata interest on normative loan	27.23	22.93	19.87	14.44	9.02

Name of the	Transmission Licensee	Power Grid Corpora	tion of India Limite	ed				
Project	BHADRAWATI CHANDERPUR							
Element Description	BHADRAWATI CHANDE	BHADRAWATI CHANDERPUR						
Region	Western Region		DOCO Date	May 1, 2006				

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
2019-20						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	61.70	0.00	61.70	61.70	3.34	1.25
Transmission Line	2,170.16	0.00	2,170.16	2,170.16	5.28	32.89
Sub Station	1,418.25	0.00	1,418.25	1,418.25	5.28	21.49
Comm. Sys. excluding Fiber Optic	129.79	0.00	129.79	129.79	6.33	1.61
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	3,779.90	0.00	3,779.90	3,779.90	0.00	57.24
Weighted Average Rate of Depreciation(%)					1.514326	

2020-21		9			
Land(Freehold)	0.00	0.00	0.00	0.00	0.00

Civil & Building	61.70	0.00	61.70	61.70	3.34	1.25
Transmission Line	2,170.16	0.00	2,170.16	2,170.16	5.28	32.89
Sub Station	1,418.25	0.00	1,418.25	1,418.25	5.28	21.49
Comm. Sys. excluding Fiber Optic	129.79	0.00	129.79	129.79	6.33	1.61
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	3,779.90	0.00	3,779.90	3,779.90	0.00	57.24
Weighted Average Rate of Depreciation(%)					1.514326	

2021-22						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	61.70	0.00	61.70	61.70	3.34	1.25
Transmission Line	2,170.16	0.00	2,170.16	2,170.16	5.28	32.89
Sub Station	1,418.25	0.00	1,418.25	1,418.25	5.28	21.49
Comm. Sys. excluding Fiber Optic	129.79	0.00	129.79	129.79	6.33	1.61
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	3,779.90	0.00	3,779.90	3,779.90	0.00	57.24
Weighted Average Rate of Depreciation(%)					1.514326	RPO <sub>n</sub>

2022-23						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	61.70	0.00	61.70	61.70	3.34	1.25
Transmission Line	2,170.16	0.00	2,170.16	2,170.16	5.28	32.89
Sub Station	1,418.25	0.00	1,418.25	1,418.25	5.28	21.49
Comm. Sys. excluding Fiber Optic	129.79	0.00	129.79	129.79	6.33	1.61
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	3,779.90	0.00	3,779.90	3,779.90	0.00	57.24
Weighted Average Rate of Depreciation(%)					1.514326	

2023-24						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	61.70	0.00	61.70	61.70	3.34	1.25
Transmission Line	2,170.16	0.00	2,170.16	2,170.16	5.28	32.88
Sub Station	1,418.25	0.00	1,418.25	1,418.25	5.28	21.49
Comm. Sys. excluding Fiber Optic	129.79	0.00	129.79	129.79	6.33	1.61
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	3,779.90	0.00	3,779.90	3,779.90	26.90	57.23

Page 3 of 4

0322001 : Truing Up: BHADRAWATI CHANDERPUR

Weighted Average Rate of Depreciation(%)		1.514061	
1 1			



## **Statement of Depreciation**

Name of the	Transmission Licensee	Power Grid Corporati	on of India Limited	
Project	BHADRAWATI CHAND	ERPUR		
Element Description	BHADRAWATI CHAND	ERPUR		
Region	Western Region		DOCO Date	May 1, 2006

2019-20	2020-21	2021-22	2022-23	2023-24
				366.00
500.00	300.00	000.00	000.00	000.00
366.00	365.00	365.00	365.00	366.00
31.00	31.00	31.00	31.00	31.00
12.00	13.00	14.00	15.00	16.00
19.00	18.00	17.00	16.00	15.00
3,779.90	3,779.90	3,779.90	3,779.90	3,779.90
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
3,779.90	3,779.90	3,779.90	3,779.90	3,779.90
3,779.90	3,779.90	3,779.90	3,779.90	3,779.90
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
3,779.90	3,779.90	3,779.90	3,779.90	3,779.90
3,401.91	3,401.91	3,401.91	3,401.91	3,401.91
		¢ .		
1.514326	1.514326	1.514326	1.514326	1.514061
	31.00 12.00 19.00 3,779.90 0.00 3,779.90 0.00 0.00 3,779.90 3,779.90 3,401.91	366.00       365.00         366.00       365.00         31.00       31.00         12.00       13.00         19.00       18.00         3,779.90       3,779.90         0.00       0.00         3,779.90       3,779.90         3,779.90       3,779.90         0.00       0.00         0.00       0.00         3,779.90       3,779.90         3,401.91       3,401.91	366.00       365.00       365.00         366.00       365.00       365.00         31.00       31.00       31.00         12.00       13.00       14.00         19.00       18.00       17.00         3,779.90       3,779.90       3,779.90         0.00       0.00       0.00         3,779.90       3,779.90       3,779.90         3,779.90       3,779.90       3,779.90         0.00       0.00       0.00         0.00       0.00       0.00         3,779.90       3,779.90       3,779.90         3,401.91       3,401.91       3,401.91	366.00       365.00       365.00       365.00         366.00       365.00       365.00       365.00         31.00       31.00       31.00       31.00         12.00       13.00       14.00       15.00         19.00       18.00       17.00       16.00         3,779.90       3,779.90       3,779.90       3,779.90         0.00       0.00       0.00       0.00         3,779.90       3,779.90       3,779.90       3,779.90         3,779.90       3,779.90       3,779.90       3,779.90         0.00       0.00       0.00       0.00         0.00       0.00       0.00       0.00         3,779.90       3,779.90       3,779.90       3,779.90         3,779.90       3,779.90       3,779.90       3,779.90         3,401.91       3,401.91       3,401.91       3,401.91

1.14 Depreciation(for the period)	57.24	57.24	57.24	57.24	57.23
1.15 Depreciation(Annualised)	57.24	57.24	57.24	57.24	57.23
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	2,314.45	2,371.69	2,428.93	2,486.17	2,543.41
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	2,371.69	2,428.93	2,486.17	2,543.41	ORP 600.64

## Calculation of interest on working Capital

Form No. - 11

Name of the T	ransmission Licensee	Power Grid Corpora	ation of India Limited	d
Project	BHADRAWATI CHANDE	RPUR		
Element Description	BHADRAWATI CHANDE	RPUR		
Region	Western Region		DOCO Date	May 1, 2006

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	366.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
O&M Expenses-one month	12.36	12.80	13.25	13.71	14.19
Maintenance spares 15% of O&M Expenses	22.25	23.04	23.84	24.68	25.55
Receivables equivalent to 45 days of AFC	55.65	55.85	56.07	56.11	56.19
Total Working capital	90.26	91.69	93.16	94.50	95.93
Bank Rate as on 01.04.2019 or as on 01st April of the COD year,whichever is later.	12.05	11.25	10.50	10.50	12.00
Interest on working capital	10.88	10.32	9.78	9.92	11.51
Pro rata interest on working capital	10.88	10.32	9.78	9.92	URA 11.51

## Drawdown schedule Calculation of IDC & Financing Charges

Name of the Tr	Name of the Transmission Licensee   Power Grid Corporation of India Limited		
Project	BHADRAWATI CHANDERPUR		
Element Description	BHADRAWATI CHANDERPUR		
Region	Western Region	DOCO Date	May 1, 2006

=
豢
2
တ်
R <sub>S</sub>
.⊑
겉
2
Ĕ
⋖

		Quarter 1			Quarter 2			Quarter n (COD)	ler n (COD)
Particulars	Quantum in FC	Ex. Rate on Amount in Drawn Indian Down Date Rupee	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Down Date	Amount In Indian Rupee	Quantum in FC	Ex. Rate on Drawn Down Date	Ex. Rate on Amount in Indian Drawn Bate
Loans					No. of the second secon				
Foreign Loans									
Total of Foreign Loans									
Indian Loans									
BOND XVII -DOCO DRAWL ON 01-MAY									
Draw Down Account									711.00
IDC									
GR Financing Charges									
10									
BOND XVIII -DOCO DRAWL ON 01-MAY									

of 2

0322001 : Truing Up: BHADRAWATI CHANDERPUR

106

Draw Down Account	1,383.00
IDC	
Financing Charges	
BOND XXVII -DOCO DRAWL ON 01-MAY	
Draw Down Account	138.00
IDC	
Financing Charges	
Total of Indian Loans	2,232.00
Total of Loan Drawn	2,232.00

## Details of Initial Spares

Name of the Ti	Name of the Transmission Licensee Pow	Power Grid Corporation of India Limited		
Project	BHADRAWATI CHANDERPUR	N.		
Element Description	BHADRAWATI CHANDERPUR	UR		
Region	Western Region		DOCO Date	May 1, 2006

0		Initial	Initial Spare Capi	pitalised as per E Cut-off Date	s per Book f Date	italised as per Books of Account up to Cut-off Date	unt up to				Exce from Plant	Adjus ss Ini Capit	Adjustment of Excess Initial Spare from Capital cost of Plant and machinery
	Plant and machinery cost as on cut-off Date	As on COD	As ACE dr. Y1	As ACE dr. Y2	As ACE dr. Y3	As ACE dr. Y4	Total as on Cut off Date	Celling limit as mentioned in Regulation s 23	Entitled Initial Spare as per Per Regulation s	Excess of capitalised Initial Spare to be reduced from Capital cost	Ö	ACE 70 T	ACE ACE for Y2 Y3
Transmission Lines	00:00	0.00	00.00	0.00	0.00	00.00	0.00	1.00	0	0			
Substation Green field	00.00	00.00	0.00	0.00	00'0	00.00	00.00	4.00	0	0			
Substation Brown field	00.00	00.00	0.00	0.00	00.00	00.00	00.00	00.9	0	0			
Series Com. devices and HVDC station	0.00	00.00	00.00	0.00	00.0	0.00	00.00	4.00	0	0			
GIS/S- Green field	00.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0	0			
GIS/S- Brown field	00.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	0	0	ORPO	6	
Communication System	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.50	C	0/8		310	

Static Synchronous Compensator	00.00	00.00	00.00	0.00	00.00	00'0	0.00	00.0	0	0		
IT Equip. & S/w	0.00	0.00	0.00	00.00	0.00	0.00	0.00	00.00	0	0		
Initial spare as per Books of Account	00.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0		
Un-Discharge Liabilities including	00.00	00.00	0.00	0.00	00.00	0.00	0.00	00.0	0	0		
Discharge of Liabilities	00.00	0.00	0.00	0.00	0.00	0.00	00.00	00.0	0	0		
Total Capitalized initial spare	00.00	0.00	0.00	0.00	00.00	0.00	0.00	00.00	0	0		

NDIA

109

Name of the	Transmission Licensee:	Power Grid Corporation	on of India Limited	
Project	BHADRAWATI CHAND	ERPUR		
Element Description	BHADRAWATI CHAND	ERPUR		
Region	Western Region		DOCO Date	May 1, 2006

Particulars	0004.05	0000 00		y unount in the	
ditionals	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	57.24	57.23	57.24	57.22	57.24
Interest on Loan-Form No. 9E	3.60	0.45	0.00	0.00	0.00
Return on Equity-Form No. 8	208.96	208.96	208.96	208.96	208.96
Int. on Working capital-Form No.11	9.94	10.20	10.52	10.85	11.23
Op. and maintenance-Form No.2	137.42	144.63	152.21	160.21	168.60
Total AFC	417.16	421.47	428.93	437.240	IND/448.03

Name of the Tr	Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	BHADRAWATI CHANDERPUR	ERPUR		
Element Description	BHADRAWATI CHANDERPUR	ERPUR		
Region	Western Region		DOCO Date	May 1, 2006

A) Summary of Capital Cost, Means of Finance of the Asset

111

(Amount in Rs. Lakh)

	i) Apportioned Approved Cost	tioned d Cost		ii) Summary	of Actual /	ii) Summary of Actual / Projected Capital Expenditure incurred	apital Expe	anditure inc	urred
Particular	As Per IA	As per RCE	As on COD / 01.04.2024	2024-25	2025-26	2026-27	2027-28	2028-29	As on 31 03 2020
Land (Freehold Land)	00.00	00.00	00'0	00.00	0.00	00.0	000	000	_
Building & Civil Works	00.00	0.00	61.70	0.00	0.00	000	000		ď
Transmission Lines	0.00	0.00	2,170,16	0.00	000	00.0		0.00	Ç
Substations	00.00	0.00		0.00	000	000		0.0	
Comm. Sys. excluding Fiber Optic	00:00	0.00		00.00	000	00.0	00.0	00.0	-
Land (Leasehold)	0.00	00.00	0.00	00.00	000	00.0	00.0	00.0	6/.87
IT/Software/UNMS/URTDSM/	0.00	00.00	0.00	00.0	000	0000	0.00	0.0	0.00
Batteries	0.00	0.00	000	000	2000	9	00.0	0.00	0.00
Fiber Ontic/OPGW			0000	9 6	50.0	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	00.00	0.00	0.00
Total Capital Cost as per Books	00.00	00.00	3,779.90	00.0	00.00	0.00	0.00	000	3 779 90
Less: Liability	00.00	0.00	00.00	0.00	00'0	0.00	000	000	00.0
Add:discharge of liability	00.00	0.00	0.00	0.00	0.00	0.00	000	000	00.0
De cap During Year As per Books	00.00	00.00	0.00	0.00	0.00	0.00	0.00	000	00.0
Total Capital incurred	00.00	00.00	3,779.90	00.00	00.00	0.00	000	000	3 779 90
Foreith	000	000					200	90	0,119.00

2,667.32 1,112.58

0.00

0.00

0.00 0.00

0.00 0.00

0.00 0.00

0.00 0.00

1,112.58 2,667.32

0.00 0.00

0.00 0.00



# 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	BHADRAWATI CHANDERPUR		
Element Description	BHADRAWATI CHANDERPUR		
Region	Western Region	DOCO Date	May 1, 2006

## 1. Transmission Lines

							100	(Amount in Rs. Lakh)	Ks. Lak	(-
	Type of	S/C or	No of Sub-	Voltage	Line	Line Reactor	Line	Date of	Covere pre pet	ed in the sent ition
Name of Line	Line AC/ HVDC	D/C	Conductors	Level	Bays	D/C Conductors Level Bays (Including Length Commercial Yes/No If No, KW Switchable Km operation Reactor)	Length	Commercial	Yes/No	If No, Petition No.
BHADRAWATI CHANDERPUR	AC	DC	2	400 KV 0.000 0.000	0.000	0.000	22.420	22.420 May 1, 2006	>	

## Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
DOUBLE CIRCUIT (TWIN CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.861	0.906	0.953	1.003	1.056
World Units - ( Length in KM )	22.42	22.42	22.42	22.42	22.42
no O & McClaimed	19.30	20.31	21.37	22.49	23.68

	Type of Voltage	Voltage	No. of Transfor ms/		Š.	No. of Bays		<b>X</b>	VA/MV	MVA/MVAR Capacity	acity	Date of	Covered in the present	ed en
Name of Sub-station	Substation Level KV	Level	Reactor/ SVC etc. (with capacity)	765 KV	60 × ×	220 KV	132 K	765 KV	6.5 € 5	220 KV	132 K	Comm. operation	No Ne	S EE S
Bhadrawati:BHADRAWATHI CHANDRAPUR	Conventio	400 KV			2.000							May 1, 2006 Y	<b>&gt;</b>	
Chandrapur:BHADRAWATHI CHANDRAPUR(MSEB)	Conventio nal	400 KV			2.000							May 1, 2006 Y	>	

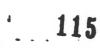
Summary:

O&M Expenses For Substations Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
400KV SUB-STATION					
Normative Rate of O&M as per Regulation	29.53	31.08	32.71	34.43	36.23
No. of Units	4.00	4.00	4.00	4.00	4.00
O&M Claimed	118.12	124.32	130.84	137.72	144.92





Summary:



Particular	2024-25	2025-26	2026-27	2027-28	2028-29
A) Normative O&M					
Transmission Line	19.30	20.31	21.37	22.49	23.68
Substation	118.12	124.32	130.84	137.72	144.92
Communication System	00:00	0.00	0.00	0.00	0.00
Total Normative O&M	137.42	144.63	152.21	160.21	168.60
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through as separate Petition )					
*Security Expenses	00.00	0.00	00.0	0.00	0.00
*Actual Capital Spare consumed	00.00	00.00	00.00	0.00	0.00
Insurance Premium Paid	00.0	00.00	0.00	0.00	00:00
Fotal O&M	137.42	144.63	152.21	160.21	168.60



### Normative parameters considered for tariff computations

Name of the	Transmission Licensee	Power Grid Corporat	tion of India Limited	
Project	BHADRAWATI CHANDE	RPUR		
Element Description	BHADRAWATI CHANDE	RPUR		
Region	Western Region		DOCO Date	May 1, 2006

(Amount in Rs. Lakh) **Particulars** 2023-24 2024-25 2025-26 2026-27 2027-28 2028-29 Base Rate of Return of Equity (in %) 17.472 17.472 17.472 17.472 17.472 17.472 Tax Rate (in %) Effective tax rate (in %) 18.782 18.782 18.782 Grossed up Rate for ROE of 15.5% (in %) 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 98.00 98.00 98.00 98.00 98.00 98.00 Target availability - AC System (in %) 96.00 96.00 96.00 96.00 96.00 96.00 Target availability - HVDC System (in %) Norms for sub-station Bays (Rs Lakh per bay) 41.34 45.79 48.20 765 kV 51.68 43.51 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 15.78 16.61 17.48 18.40 19.35 18.46 Norms for Transformers (Rs Lakh per MVA) 0.29 0.305 0.322 765 kV 0.564 0.262 0.276 400 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 0.29 0.00 0.262 0.276

					-	
220 kV	0.00	0.262	0.276	0.29	0.305	0.322
132 kV and below	0.00	0.262	0.276	0.29	0.305	0.322
Norms for AC and HVDC lines (Rs Lakh per km)						
Single Circuit (Bundled Conductor with six or more sub-conductors)	1.011	0.861	0.906	0.953	1.003	1.056
Single Circuit (Bundled conductor with four sub-conductors)	0.867	0.738	0.776	0.817	0.86	0.905
Single Circuit (Twin & Triple Conductor)	0.578	0.492	0.518	0.545	0.573	0.603
Single Circuit (Single Conductor)	0.289	0.246	0.259	0.272	0.287	0.302
Double Circuit (Bundled conductor with four or more sub-conductors)	1.517	1.291	1.359	1.43	1.506	1.585
Double Circuit (Twin & Triple Conductor)	1.011	0.861	0.906	0.953	1.003	1.056
Double Circuit (Single Conductor)	0.433	0.369	0.388	0.409	0.43	0.453
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.662	2.266	2.385	2.51	2.642	2.781
Multi Circuit (Twin & Triple Conductor)	1.773	1.509	1.588	1.671	1.759	1.851
Norms for HVDC stations (Rs Lakh/MW)						
HVDC bipole scheme (Rs Lakh/MW)	0.00	1.04	1.10	1.16	1.22	1.28
HVDC Back-to-Back stations (Rs Lakh/MW) (Except Gazuwaka BTB)	0.00	2.07	2.18	2.30	2.42	2.55
Gazuwaka HVDC Back-to-Back station (Rs Lakh/ MW)	0.00	1.83	1.92	2.03	2 12	2.24

## Abstract of existing transmission assets/elements under Project, Determination of Effective COD and Form No. -4 weighted Average life for single AFC for the project as whole

Name of the Tr	Name of the Transmission Licensee Power	Power Grid Corporation of India Limited		
Project	BHADRAWATI CHANDERPUR			
Element Description	BHADRAWATI CHANDERPUR			
Region	Western Region		DOCO Date	May 1, 2006

A) Details of All the Asset Covered under the Scope of the Project

I	4 H O	
. Lakn)	Balance useful Life of the project as on 01.04.2024 ( Refer E)	14
(Amount in Ks. Lakn)	Weighted Lapsed Average useful Life of the project as the project on 01.04.2024 (Refer E) (Refer E)	17
	Weighted Average useful life of the project (Refer D)	6
	Effective Work COD for the Argument project as user whole ( Refer the C)	
	COD considered for tariff purpose	
	Actual COD of the asset	
30000		
YIII IO Odooo o		
	set Name	

119

B) Details as on 01.04.2024 for determination of Single Tariff for the Project Commissioned prior to 01.04.2024

C) Computation of Effective COD for determining lapsed useful life of the project as whole

D) Weighted Average useful Life of the Project as whole

E) Lapsed Weighted average useful life of the project & Balance weighted average Useful life
This refers to the No. of completed years from the effective COD till the last day of the previous tariff period ( i.e. 31.03.2024 )

O Complective COD	
Lastedate of the previous tariff control period	Mar 31, 2024
of Completed years lapsed as on 01.04.2024 (2) - (1)	17



Sheet 2 of 2 0322001: BHADRAWATI CHANDERPUR

## Statement of Capital cost

Name of the Tra	Name of the Transmission Licensee   Power Grid Corporation of India Limited		
Project	BHADRAWATI CHANDERPUR		
Element Description	BHADRAWATI CHANDERPUR		
Region	Western Region	DOCO Date	May 1, 2006

A) Capital Cost

121

(Amount in Rs. Lakh)

		( minden in the Edite)	(1)
Particular	Accrual Basis	Un-discharged Liabilities	Cash Basis
As on relevant date :2024-25			
a) Opening Gross Block Amount as per books	3,779.90	0.00	3.779.90
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	0.00	0.00	
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	0.00	00.0	000
		20.0	;

a) Addition in Gross Block Amount during the period	00:00	0.00	00.0
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	3,779.90	0.00	3,779.90
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	0.00	0.00	00:00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	00'0	0.00	000
			20:0

9
Ş
S
Z
:2025-26
date
4
O
Ħ
a
6
relevant
5
10

a) Opening Gross Block Amount as per books	3,779.90	
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	00.00	

Page 1 of 4 0322001 : BHADRAWATI CHANDERPUR

c) Annount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	00.0	00'0	0.00
a) Addition in Gross Block Amount during the period	0.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	00:00
d) De-cap in gross block amount during the year	00.00	0.00	0.00

a) Closing Gross Block Amount as per books	3,779.90	00.00	3,779.90
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above		000	000
	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	00.00	00.00	0.00

As on relevant date :2026-27			
a) Opening Gross Block Amount as per books	3,779.90	00'0	3,779.90
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	0.00	00.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	0.00	0.00	0.00

a) Addition in Gross Block Amount during the period	00'0	00.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	00.00
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	00.00	00 0

a) Closing Gross Block Amount as per books	3,779.90	0.00	3,779.90
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	0.00	00.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	00.00	00.00	00.0
			1

As on relevant date :2027-28		
a) Opening Gross Block Amount as per books	3,779.90	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	0.00	0.00.0
	00.0	0.00

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	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	00.00	000	000
d) De-cap in gross block amount during the year			000
	0.00	00.00	00.00

a) Closing Gross Block Amount as per books	3,779.90	00.00	3,779.90
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	00.00	00.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	00.00	00.00	00.00

As on relevant date :2028-29			
a) Opening Gross Block Amount as per books	3,779.90	0.00	3.779.90
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	0.00	00:00	0.00

a) Addition in Gross Block Amount during the period	0.00	0.00	000
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	00.00	00.0
d) De-cap in gross block amount during the year	00.00	000	000

Control of the state of the sta			
a) crossing gross brock Amount as per books	3,779.90	0.00	3,779.90
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	00.00	00.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	0.00	0.00	0.00

j.
Asse
the
ģ
)    
lat
of
8
三
Ω

B) Flow of liability for the Asset							(Amount in Rs. Lakh)	Rs. Lakh)
Particular								
Opening balance of liability	0.00	0.00	0.00	0.00	0.00	00.00	00.00	OCO GRID COLO
Add: Liability from ACE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	OO OO OO OO OO OO

Page 3 of 4 0322001: BHADRAWATI CHANDERPUR

Discharge of liability by	0	0							
payment and claimed as ACE	00.00	0.00	0.00	0.00	0.00	0.00	0.00	00.00	00.0
Reversal/cancelation /to be									
	00.00	000	000	000	000	000	000		0
entered)					0.0	9.0	20.0	0.00	0.00
Closing Ralanco of Admitted									
Cosmy Dalance of Admitted	000	000	000	000	000	0	0	0	
liability	2	0.0	00.0	00.0	00.0	0.00	0.00	0.00	0.00



Name of the Tr	Name of the Transmission Licensee Power Grid	Power Grid Corporation of Indi	of India Limited		
Project	BHADRAWATI CHANDERPUR				
Element Description	BHADRAWATI CHANDERPUR				
Region	Western Region	DOCO Date	May 1, 2006	SCOD	



Page 1 of 1 0322001: BHADRAWATI CHANDERPUR

Name of the	Transmission Licensee	Power Grid Corporation	on of India Limite	d
Project	BHADRAWATI CHAND	DERPUR		
Element Description	BHADRAWATI CHAND	ERPUR		
Region	Western Region		DOCO Date	May 1, 2006

Financial Package as

Currency

Financial Package as

**Amount** 

**Approved** 

Currency

**Particulars** 

on COD 01/04/2024 01/04/2024 **Amount** Currency **Amount** 

(Amount in Rs. Lakh)

As Admitted on COD

Loans 0.00 0.00 0.00 Loan-Domestic 0.00 0.00 0.00 Loan-Foreign 0.00 0.00 0.00 **Total Loans INR** 0.00 0.00 **INR** 2,667.32 Equity 0.00 0.00 0.00 Foreign 0.00 0.00 0.00 **Domestic** INR 0.00 0.00 **INR** 1,112.57 **Total Equity INR** 0.00 0.00 **INR** 1,112.57

Debt Equity Ratio				71:29	
Total Cost	INR	0.00	0.00	INR	3,779.89

Particulars	Debt	Equity	Total	
Addcap for 2024 - 2025			0.00	
Addcap for 2025 - 2026			0.00	
Addcap for 2026 - 2027			0.00	
Addcap for 2027 - 2028			0.00	(2) Acade

Page 1 of 2

0322001 : BHADRAWATI CHANDERPUR

|--|

Particulars	Actual	Normative	
Addcap for 2024 - 2025			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2025 - 2026			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2026 - 2027			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2027 - 2028			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2028 - 2029			
Equity		0.00	
Debt		0.00	
Total		0.00	
Total Capital cost with Addcap		3,779.89	ORATIC! OF

Name of the	Transmission Licensee	Power Grid Corporat	ion of India Limited	I
Project	BHADRAWATI CHANDE	ERPUR		·
Element Description	BHADRAWATI CHANDE	RPUR		
Region	Western Region		DOCO Date	May 1, 2006

	Addition into Gross Block as	De-Cap into Gross Block as	Less: Deductions dr. the year towards				Add: Discharge of	ACE on cash	in
Particulars	per books of Account during the year (2)		Grants Receiv ed (if any) (3)	Asset pertaini ng to other busines s (If any)	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	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 :2025-26 (Actual/Projected)								ORATION O	120

		Page 2 o	6.0					O THE	1
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2027-28 (Actual/Projected)									
Total	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
Batteries	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
Land (Leasehold)	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
Substations	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
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2026-27 (Actual/Projected)									
Total	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
Batteries	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
Land (Leasehold)	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
Substations	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
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2028-29 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	800 RA	0.00

## Financing of Additional Capitalisation

Name of the Tr	Name of the Transmission Licensee Power Grid Corporation of India Limited	f India Limited	
Project	BHADRAWATI CHANDERPUR		
Element Description	BHADRAWATI CHANDERPUR		
Region	Western Region	DOCO Date	May 1, 2006

Financial Year ( Starting of COD)		,	Actual/Projected	octed				Admitted	The second	
	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										
13										
Financing Details										
a di										
Total Loan	00.00	0.00	00.00	00.00	00.00					
Equity	00.00	00.00	00.00	00.00	0.00					
Total	0.00	0.00	00.00	0.00	0.00				1	00000 0 100

### **Calculation of ROE**

Form No. - 8

Name of the 1	ransmission Licensee	Power Grid Corporation	on of India Limited	
Project	BHADRAWATI CHAND	ERPUR		
Element Description	BHADRAWATI CHAND	ERPUR		
Region	Western Region		DOCO Date	May 1, 2006

(Amount in Rs. Lakh)

(Petition Parmos

<b>5</b>				(Amount in R	s. Lakh)
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the year	365.00	365.00	365.00	366.00	365.00
No. of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
Opening Normative Equity	1,112.57	1,112.57	1,112.57	1,112.57	1,112.57
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)	1,112.57	1,112.57	1,112.57	1,112.57	1,112.57
Add: Increase in Equity due to addition during the year / period	0.00	0.00	0.00	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	0.00	0.00	0.00	0.00
Closing Normative Equity	1,112.57	1,112.57	1,112.57	1,112.57	1,112.57
Average Normative Equity	1,112.57	1,112.57	1,112.57	1,112.57	1,112.57
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 Rate	17.472	17.472	17.472	17.472	17.472
Grossed up rate of ROE	18.782	18.782	18.782	18.782	18.782
Pro rata return on Equity	208.96	208.96	208.96	208.96	208.96
Return on Equity	208.96	208.96	208.96	208.96	208.96

Name of the T	ransmission Licensee	Power Grid Corporation	on of India Limited					
Project	BHADRAWATI CHAND	ERPUR						
Element Description	BHADRAWATI CHAND	BHADRAWATI CHANDERPUR						
Region	Western Region		DOCO Date	May 1, 2006				

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
BOND XVII -DOCO DRAWL ON 01-MAY					
Gross Loan- Opening	711.00	711.00	711.00	711.00	711.00
Cumulative repayments of Loans upto previous year	711.00	711.00	711.00	711.00	711.00
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	0.00
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	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	7.39	7.39	7.39	7.39	7.39
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XVIII -DOCO DRAWL ON 01-MAY					
Gross Loan- Opening	1,383.00	1,383.00	1,383.00	1,383.00	1,383.00
Cumulative repayments of Loans upto previous year	1,383.00	1,383.00	1,383.00	1,383.00	1,383.00
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	0.00
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	0.00

Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.15	8.15	8.15	8.15	8.15
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XXVII -DOCO DRAWL ON 01-MAY					
Gross Loan- Opening	138.00	138.00	138.00	138.00	138.00
Cumulative repayments of Loans upto previous year	138.00	138.00	138.00	138.00	138.00
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	0.00
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	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.47	9.47	9.47	9.47	9.47
Interest on loan	0.00	0.00	0.00	0.00	0.00

## Summary

Gross Loan- Opening	2,232.00	2,232.00	2,232.00	2,232.00	2,232.00
Cumulative repayments of Loans upto previous year	2,232.00	2,232.00	2,232.00	2,232.00	2,232.00
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	0.00
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	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.4696	9.4696	9.4696	9.4696	9.4696
Interest on loan	0.00	0.00	0.00	CORPOR	0.00

(Petitioner)



135

Page 3 of 3

0322001 : BHADRAWATI CHANDERPUR

Name of the										
Project	Project BHADRAWATI CHANDERPUR									
Element Description	BHADRAWATI CHANDERPUR									
Region	Western Region		DOCO Date	May 1, 2006	RPORA					

Name of the	Transmission Licensee								
Project	bhadrawati chanderpur								
Element Description	BHADRAWATI CHANDERPUR								
Region	Western Region DOCO Date May 1, 2006								

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	2,667.32	2,667.32	2,667.32	2,667.32	2,667.32
Cumulative repayments of Normative Ioan upto previous year	2,600.64	2,657.88	2,667.32	2,667.32	2,667.32
Net normative loan-Opening	66.68	9.44	0.00	0.00	0.00
Addition in normative loan towards the ACE	0.00	0.00	0.00	0.00	0.00
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	57.24	9.44	0.00	0.00	0.00
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	9.44	0.00	0.00	0.00	0.00
Average normative loan	38.06	4.72	0.00	0.00	0.00
Weighted Average Rate of interest on actual loan	9.4696	9.4696	9.4696	9.4696	9.4696
Interest on normative loan	3.60	0.45	0.00	0.00	0.00
Pro rata interest on normative loan	3.60	0.45	0.00	0.00	ORATIO 0.00

## Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the T	Fransmission Licensee	Power Grid Corpora	tion of India Limite	d				
Project	BHADRAWATI CHANDERPUR							
Element Description	BHADRAWATI CHANDERPUR							
Region	Western Region		DOCO Date	May 1, 2006				

(Amount in Rs. Lakh)

					(Amount in Rs. Lakn)			
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	61.70	0.00	61.70	61.70	3.34	1.25		
Transmission Line	2,170.16	0.00	2,170.16	2,170.16	5.28	32.89		
Sub Station	1,418.25	0.00	1,418.25	1,418.25	5.28	21.49		
Comm. Sys. excluding Fiber Optic	129.79	0.00	129.79	129.79	15.00	1.61		
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	9.50	0.00		
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00		
TOTAL	3,779.90	0.00	3,779.90	3,779.90	0.00	57.24		
Weighted Average Rate of Depreciation(%)					1.514326			

2025-26					
Land(Freehold)	0.00	0.00	0.00	0.00	

0.00 ND 0.00

Civil & Building	61.70	0.00	61.70	61.70	3.34	1.25
Transmission Line	2,170.16	0.00	2,170.16	2,170.16	5.28	32.88
Sub Station	1,418.25	0.00	1,418.25	1,418.25	5.28	21.49
Comm. Sys. excluding Fiber Optic	129.79	0.00	129.79	129.79	15.00	1.61
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	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	3,779.90	0.00	3,779.90	3,779.90	0.00	57.23
Weighted Average Rate of Depreciation(%)					1.514061	

2026-27						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	61.70	0.00	61.70	61.70	3.34	1.25
Transmission Line	2,170.16	0.00	2,170.16	2,170.16	5.28	32.89
Sub Station	1,418.25	0.00	1,418.25	1,418.25	5.28	21.49
Comm. Sys. excluding Fiber Optic	129.79	0.00	129.79	129.79	15.00	1.61
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	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	3,779.90	0.00	3,779.90	3,779.90	0.00	57.24
Weighted Average Rate of Depreciation(%)					1.514326	



2027-28						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	61.70	0.00	61.70	61.70	3.34	1.25
Transmission Line	2,170.16	0.00	2,170.16	2,170.16	5.28	32.88
Sub Station	1,418.25	0.00	1,418.25	1,418.25	5.28	21.49
Comm. Sys. excluding Fiber Optic	129.79	0.00	129.79	129.79	15.00	1.60
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	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	3,779.90	0.00	3,779.90	3,779.90	0.00	57.22
Weighted Average Rate of Depreciation(%)					1.513797	

2028-29						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	61.70	0.00	61.70	61.70	3.34	1.25
Transmission Line	2,170.16	0.00	2,170.16	2,170.16	5.28	32.89
Sub Station	1,418.25	0.00	1,418.25	1,418.25	5.28	21.49
Comm. Sys. excluding Fiber Optic	129.79	0.00	129.79	129.79	15.00	1.61
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	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	<b>Q</b> 0 0 6.33	0.00
TOTAL	3,779.90	0.00	3,779.90	3,779.90		57.24

Page 3 of 4

0322001: BHADRAWATI CHANDERPUR

1 4 0

Weighted Average Rate of Depreciation(%)	1.514326	
--	----------	--



### **Statement of Depreciation**

Name of the T	Fransmission Licensee	Power Grid Corporati	on of India Limited	
Project	BHADRAWATI CHANDI	ERPUR		
Element Description	BHADRAWATI CHANDI	ERPUR		
Region	Western Region		DOCO Date	May 1, 2006

(Amount in Rs. Lakh) **Particulars** 2024-25 2025-26 2026-27 2027-28 2028-29 No of Davs 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/ 31.00 31.00 31.00 31.00 31.00 Project 1.2 Lapsed Weighted Average useful life of the 17.00 18.00 19.00 20.00 21.00 Asset/Project(in completed no. of year) 1.3 Balance Weighted Average useful life of 14.00 13.00 12.00 11.00 10.00 the Asset/Project(in completed no. of year) **Capital Base** 1.4 Opening capital cost 3.779.90 3.779.90 3,779.90 3.779.90 3.779.90 1.5 Additional Capital Expenditure dr. the year 0.00 0.00 0.00 0.00 0.00 1.6 De-Capitalisation During the year 0.00 0.00 0.00 0.00 0.00 1.7 Closing capital cost 3.779.90 3,779.90 3.779.90 3,779.90 3,779.90 1.8 Average capital cost 3,779.90 3,779.90 3,779.90 3,779.90 3,779.90 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 0.00 0.00 0.00 0.00 0.00 in 1.8 1.11 Asset having 10% salvage value included 3,779.90 3,779.90 3.779.90 3,779.90 3,779.90 in 1.8 1.12 Depreciable Value(1.10+90% of 1.11) 3,401.91 3,401.91 3,401.91 3,401.91 3,401.91 Depreciation for the period and Cum. Depreciation 1.13 Weighted Average Rate of depreciation 1.514326 1.514061 1.514326 1.514326 1.513797

Page 1 of 2

0322001 : BHADRAWATI CHANDERPUR



1.14 Depreciation(for the period)	57.24	57.23	57.24	57.22	57.24
1.15 Depreciation(Annualised)	57.24	57.23	57.24	57.22	57.24
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	2,600.64	2,657.88	2,715.11	2,772.35	2,829.57
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	2,657.88	2,715.11	2,772.35	2,829.57	2,886.81

Name of the	Transmission Licensee	Power Grid Corpora	ition of India Limite	d
Project	BHADRAWATI CHANDE	RPUR		
Element Description	BHADRAWATI CHANDE	RPUR		
Region	Western Region		DOCO Date	May 1, 2006

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
O&M Expenses-one month	11.45	12.05	12.68	13.35	14.05
Maintenance spares 15% of O&M Expenses	20.61	21.69	22.83	24.03	25.29
Receivables equivalent to 45 days of AFC	51.43	51.96	52.88	53.76	54.99
Total Working capital	83.49	85.70	88.39	91.14	94.33
Bank Rate as on 01.04.2019 or as on 01st April of the COD year,whichever is later.	11.90	11.90	11.90	11.90	11.90
Interest on working capital	9.94	10.20	10.52	10.85	11.23
Pro rata interest on working capital	9.94	10.20	10.52	10985	11.23

Drawdown schedule Calculation of IDC & Financing Charges

Name of the Tr	Name of the Transmission Licensee Power Grid Corporation of India Limited		
Project	BHADRAWATI CHANDERPUR		
Element Description	BHADRAWATI CHANDERPUR		
Region	Western Region	DOCO Date	May 1, 2006

		Quarter 1			Quarter 2			Quarter n (COD)	ter n (COD)
Particulars	Quantum in FC	Ex. Rate on Drawn Down Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Down Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Down Date	Ex. Rate on Amount in Indian Drawn Date
Loans									
Foreign Loans									
Total of Foreign Loans									
Indian Loans									
BOND XVII -DOCO DRAWL ON 01-MAY									
aw Dewn Account									711.00
and all all and all and all all and all all and all all and all all all and all all all and all all all all all all all all all al									
Emancing Charges									
BOND XVIII -DOCO DRAWL ON 01-MAY	2-								
			Page 1 of 2	Lancon .	CHARLES TANKATION TO SERVICE OF THE				

145

0322001 : BHADRAWATI CHANDERPUR

Draw Down Account	1,383.00
IDC	
Financing Charges	
BOND XXVII -DOCO DRAWL ON 01-MAY	
Draw Down Account	138.00
IDC	
Financing Charges	
Total of Indian Loans	2,232.00
Total of Loan Drawn	2,232.00

			Summary of Capital Cost &	& Annual F	Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL the assets covered in the present petition	assets covered	in the presen	of notition.			FOURTS, LANI-III
Name of	Name of the Petitioner			Power Gri	Power Grid Corporation of India Ltd						
Tariff Period	riod			2019-24 & 2024-29	2024-29						
Name of	Name of the Transmission Project	on Project		"Bhadrawa Chandrap	"Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard in Western Region".	sion line includion".	ing bays at Bh	adrawati (Pow	rergrid) Sw	ritching Sta	tion (Extensions) and
											Rupees in lakh
A) Summ	ary of Capital (	Cost as on COD a	nd Additional Capital Expendit	ture claime	A) Summary of Capital Cost as on COD and Additional Capital Expenditure claimed for all the assets Covered in the instant petition.	tant petition.					
			i) Apportioned Approved Cost	Cost	ii) Summary of Actual / Projected Capital Cost	ipital Cost					
S. No.	Asset No.	COD	As per Investment approval	As per RCE	As on COD / 31.03.2019	2019-20	2020-21	2021-22	2022-23	2023-24	Capital Cost as on 31.03.2026
		1	3	4	ın	9	7	00	0	10	12=(5+6+7+8+0)
1	Asset 1	01.05.2006	3338		3779.9	0	0	0	0	0	3779.90
-	TOTAL		3338		3779,9	0	0	0	0	0	3779.9
Total Cap	Total Capital Cost Claimed	ped	3779,90								
B) Summ	ary of Annual F	ixed Cost (AFC)	B) Summary of Annual Fixed Cost (AFC) claimed for all the assets covere	d in the in	assets covered in the instant petition (2019-24)						
						R	Rupees in lakh				
S. No.	Asset No.		Asset Name and its location	and its loca	ion	2019-20	2020-21	2021-22	2022-23	2023-24	
Н	Asset 1	Bhadrawati-Cha (Powergrid) Swi Region	Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard in W Region	ion line inc	Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard in Western Region	452.66	453.02	454.81	455.1	457.03	
C) Summ	ary of Annual F	ixed Cost (AFC)	C) Summary of Annual Fixed Cost (AFC) claimed for all the assets covered in the instant petition (2024-29)	d in the in	fant petition (2024-29)						
						R	Rupees in lakh				
s. No.	Asset No.		Asset Name and its location	and its loca	ion	2024-25	2025-26	2026-27	2027-28	2028-29	
-	Asset 1	Bhadrawati-Cha (Powergrid) Swi Region	Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard in W Region	ion line incl Chandrapu	Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard in Western Region	417.16	421.47	428.93	437.24	446.03	



### 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
ORM- 1A	Summary of Asset level cost	1
ORM-2	Details of Transmission Lines and Substations and Communication	1
ORM-3	Normative parameters considered for tariff computations	1
ORM-4	Abstract of existing transmission assets/elements under project,	N.A.
ORM- 4A	Statement of Capital cost	1
ORM- 4B	Statement of Capital Works in Progress	N.A.
ORM-4C	Abstract of Capital Cost Estimates and Schedule of Commissioning for	N.A.
ORM-5	Element wise Break-up of Project/ Asset/Element Cost for	N.A.
ORM-5A	Break-up of Construction/Supply/Service packages	N.A.
ORM-5B	Details of all the assets covered in the project	✓ ·
ORM- 6	Actual Cash Expenditure and Financial Package up to COD	1
ORM- 7	Statement of Additional Capitalisation after COD	1
ORM- 7A	Financing of Additional Capitalisation	1
ORM- 7B	Statement of Additional Capitalisation during five year before the end	N.A.
ORM- 8	Calculation of Return on Equity	- 14.A.
ORM-8A	Details of Foreign Equity	N.A.
ORM-9	Details of Allocation of corporate loans to various transmission	N.A.
ORM-9A	Details of Project Specific Loans	N.A.
ORM-9B	Details of Foreign loans	
ORM-9C	Calculation of Weighted Average Rate of Interest on Actual Loans	N.A. ✓
ORM-9D	Loans in Foreign Currency	
ORM-9E	Calculation of Interest on Normative Loan	N.A.
ORM-10	Calculation of Depreciation Rate on original project cost	N.A.
ORM-10A	Statement of Depreciation	
ORM-10A	Statement of De-capitalisation	<b>√</b>
ORM-101	The state of the s	N.A.
ORM- 12	Calculation of Interest on Working Capital  Details of time over run	<b>✓</b>
		N.A.
ORM-12A	Incidental Expenditure during Construction	N.A.
ORM-12B	Calculation of IDC & Financing Charges	<b>✓</b>
ORM- 13	Details of Initial spares	N.A.
ORM- 14	Non-Tariff Income	N.A.
ORM- 15	Summary of issue involved in the petition	1
ORM A	Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL	1
14h T C	the assets covered in the present petition.	
tner inform	nation/ Documents	
No.	Information/Document	Tick
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC)	N.A.
2	Region wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & Annexure for the new Transmission  System & Communication System for the relevant years.	NA
•		
4	Copies of relevant loan Agreements Copies of the approval of Competent Authority for the Capital Cost and Financial package.	N.A. Yes
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	N.A.
8	c. PERT Chart and Bar Chart  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	N.A.
10.	Any other relevant information, (Please specify)	N.A.
Note 1, I	Hostronic conv. of the politics (in woods formed) and detailed extending a partition of the politics (in woods formed)	1444 44

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.

