# 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 Asset under LILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System" in Eastern Region under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

Power Grid Corporation of India Ltd.

---PETITIONER

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

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

Bihar State Power (Holding) Company Ltd.

---RESPONDENT

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

And others

Place:

Petitioner

Date: 30.07.2024

(Zafrul Hasan)

General Manager (Commercial)

# THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

<b>PETITION</b>	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 Asset under LILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System" in Eastern Region under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

Power Grid Corporation of India Ltd.

---PETITIONER

Registered office: B-9, Qutab Institutional Area,

Katwaria Sarai, New Delhi. - 110 016.

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

Bihar State Power (Holding) Company Ltd.

--- RESPONDENT

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

# **And others**

#### INDEX

SI. No.	Description	Enclosure No.	Page No.
	Cover Page	-	1
1	Index	-	2-3
2	Letter for registration	-	4-5
3	Memo of Parties	-	6-7
4	Memo of appearance	-	8-9
5	Petition for truing up of transmission tariff for	-	10-24
	2019-24 and determination of transmission		
	tariff for 2024-29 tariff block		50. * PO

6	Power of attorney		27
	ANNEXURES:		
7	CERC order No. 332/TT/2019 dated 25.04.2021	Encl –1	28-79
8	True up tariff forms for 2019-24 block	Encl –2	75-92
9	Tariff Forms for 2024-29 block along with loan interest proof	Encl –3	93-110
10	Checklist	Encl -4	111-114
11	Supporting affidavit	-	25-26

**FILED BY** 

POWER GRID CORPORATION OF INDIA LTD.

**GURGAON** 

DATED: 30.07.2024

REPRESENTED BY

(Zafrul Hasan)

General Manager (Commercial)

# THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

PE1	TITIC	1 NC	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 Asset under LILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System" in Eastern Region under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

Power Grid Corporation of India Ltd.

---PETITIONER

Registered office: B-9, Qutab Institutional Area,

Katwaria Sarai, New Delhi. - 110 016.

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

Bihar State Power (Holding) Company Ltd.

---RESPONDENT

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

# And others

To
The Secretary
Central Electricity Regulatory Commission
New Delhi 110001

Sir.



The present tariff Petition is filed under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024 and same may be pleased to be registered and taken on record by the Hon'ble Commission.

FILED BY

POWER GRID CORPORATION OF INDIA LTD.

**GURGAON** 

DATED: 30.07.2024

REPRESENTED BY

(Zafrul Hasan)

General Manager (Commercial)

# THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

<b>PETITI</b>	ON	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 Asset under LILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System" in Eastern Region under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

Power Grid Corporation of India Ltd.

---PETITIONER

Registered office: B-9, Qutab Institutional Area,

Katwaria Sarai, New Delhi. - 110 016.

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

Sector-29, Gurgaon-122 001, Haryana.

Bihar State Power (Holding) Company Ltd.

--- RESPONDENT

Vidyut Bhavan, Bailey Road, Patna – 800 001, Bihar.

Represented by its Chairman

And others

# **MEMO OF PARTIES**

Power Grid Corporation of India Ltd.

--- PETITIONER

**VERSUS** 

**Eastern Region** 

--- RESPONDENTS

 Bihar State Power (Holding) Company Limited Vidyut Bhawan, Bailey Road, Patna - 781001, Assam Represented by its Chairman



- West Bengal State Electricity Distribution Company Limited Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II, Salt Lake City, Kolkata - 700 091, West Bengal Represented by its Chairman.
- Grid Corporation Of Orissa Ltd
   Shahid Nagar,
   Bhubaneswar 751 007, Odisha
   Represented by its Chairman & Managing Director
- Damodar Valley Corporation
   DVC Tower, Maniktala
   Civic Centre, VIP Road,
   Kolkata 700 054, West Bengal
   Represented by its Chairman
- Power Department, Govt. of Sikkim,
   Gangtok 737 101, Sikkim
   Represented by its Commissioner and Secretary (Power)
- 6. Jharkhand Bijli Vitran Nigam Ltd Engineering Building, H.E.C., Dhurwa, Ranchi – 834 004, Jharkhand Represented by its Chairman

**PETITIONER** 

POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

Zafrul Hasan

DATED:3907.2024

**GURGAON** 

General Manager (Commercial)

# 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 Asset under LILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System" in Eastern Region under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

Power Grid Corporation of India Ltd.

---PETITIONER

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

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

Bihar State Power (Holding) Company Ltd.

---RESPONDENT

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

And others

# MEMO OF APPEARANCE

# POWER GRID CORPORATION OF INDIA LTD.

-- PETITIONER

- 1. Shri Dilip Nagesh Rozekar, ED (Commercial & Regulatory Cell), POWERGRID
- 2. Shri Mohd. Mohsin, Chief GM (Commercial & Regulatory Cell), POWERGRID
- 3. Shri V. Srinivas, Chief GM (Commercial & Regulatory Cell)
- 4. V.C. Sekhar, Sr. GM (Regulatory Cell)
- 5. Shri Zafrul Hasan, GM (Commercial), 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 30.th date of Jul'2024.

**PETITIONER** 

POWER GRID CORPORATION OF INDIA LTD.

**GURGAON** 

DATED: 30.07.2024

ZafrulHasan

Chief General Manager (Commercial)

# THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

PETITION NO.:		
---------------	--	--

# IN THE MATTER OF:

Subject matter: Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Asset under LILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System" in Eastern Region under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

Power Grid Corporation of India Ltd.

---PETITIONER

Registered office: B-9, Qutab Institutional Area,

Katwaria Sarai, New Delhi. - 110 016.

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

Bihar State Power (Holding) Company Ltd.

---RESPONDENT

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

# And others

### A. EXECUTIVE SUMMARY OF THE PETITION:

# (i) Brief Background of the Petitioner

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

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

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

POWERGRID has impleaded distribution licensees and Government department of the respective states which are engaged in distribution of electricity in Eastern 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 Eastern region.

# (iii) Background of Transmission Assets:

2. POWERGRID has filed the present petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for the following Assets which are implemented as LILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System" in Eastern Region for the following:

Asset No	Asset Name	DOCO	Remarks
Asset-I	LILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System"	01,10.2005	JD. * POW

# (iv) Summary of Claims:

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

Tariff P	eriod 2019-24			
				₹ in Lakhs
Asset No.	Apportioned Approved Cost as per FR / RCE	Expenditure Up to DOCO /31.03.2019	Expenditure during 2019-24 tariff block 2019-24	Actual Cost as on 31.03.2024
Asset-	511.00 / NA	325.31	0.00	325.31

Tariff P	eriod 2024-29			₹ in Lakhs
Asset No.	Apportioned Approved Cost as per FR / RCE	Expenditure Up to 31.03.2024	Estimated Expenditure during 2024-29 tariff block 2024-29	Total Estimated Cost as on 31.03.2029
Asset-	511.00 / NA	325.31	0.00	325.31



- 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:

Tariff Fo	Tariff For 2019-24 Block									
₹ in L										
Asset No	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24				
Asset	Approved Tariff (approved vide CERC order 332/TT/2019)	60.21	60.74	61.45	62.20	63.00				
Asset	Revised tariff (claimed vide instant petition)	60.20	60.74	61.33	62.07	63.13				

Tariff For 2024-29 Block								
					₹ in Lakhs			
Asset No	2024-25	2025-26	2026-27	2027-28	2028-29			
Asset	57.09	58.88	60.74	62.73	64.76			

# 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	LILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System"	01.10.2005	Covered under instant petition (Earlier covered under Petition no. 332/TT/2019)

# **COST DETAILS:**

10. The capital cost of Rs. 325.31 Lakhs for subject Asset-I has been admitted by Hon'ble commission vide order dated 25.04.2021 in petition no. 332/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.

### TRANSMISSION TARIFF:

# 11. Transmission tariff:

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



# Regulation 13 of Tariff Regulation 2019-24:

#### Quote

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

### Unquote

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

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

#### Quote

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

# Unquote

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

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

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

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

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

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

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

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

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

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

Truing	Truing-Up Tariff For 2019-24 Block									
₹ in Lakh										
Asset No	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24				
Asset-I	Approved Tariff (approved vide CERC order 332/TT/2019)	60.21	60.74	61.45	62.20	63.00				
	Revised tariff (claimed vide instant petition)	60.20	60.74	61.33	62.07	63.13				

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:

Tariff For 2024-29 Block								
					₹ in Lakhs			
Asset No	2024-25	2025-26	2026-27	2027-28	2028-29			
Asset	57.09	58.88	60.74	62.73	64.76			

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

- 14. The asset has already completed 12 years of useful life in tariff block 2014-19 and the remaining depreciable value has been spread across the balance useful life of the asset in accordance with the Regulation 33(5) of the CERC tariff Regulation 2024. Further, 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 shall be submitted shortly before the Hon'ble Commission.

18. The transmission charges at para-12 & 13 above is inclusive of O&M expenses derived for the subject asset based on the norms for O&M expenditure for Transmission System as specified under regulation 36 (3) (a) of the tariff regulations for block 2024-29.

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

#### SECURITY EXPANSES:

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

# **INSURANCE:**

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

#### CAPITAL SPARE:

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

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



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

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

- 21. The application filing fee, expenses incurred on publication of Notices in Newspapers and License fee may be allowed to be recovered separately from the respondents in terms of Regulation 94(1) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024. The fees and charges to be paid by the petitioner as ISTS licensee (deemed ISTS licensee) under CERC (Fees and Charges of RLDC and other matters) Regulations as amended from time to time shall also be recoverable from the DICs as provided under clause 94 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.
- 22. The Transmission Charges and other related Charges indicated at para 12 & 13 above, is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, filing fees, license fee, RLDC fees and charges, capital spares, security expenses, insurance expenses or any other kind of imposition (s) and/ or other surcharges .etc. whatsoever imposed / charged by any Government (Central/State) and / or any other local bodies/authorities/regulatory authorities in relation to transmission of electricity, environmental protection, and/or in respect of any of its installation associated with the Transmission System and the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged, billed separately by the petitioner on the respondents.



#### SHARING OF TRANSMISSION CHARGES:

- 23. Transmission Tariff for 2019-24 as per above, shall be recovered as per Regulation 57 of CERC Tariff Regulations, 2019 and CERC Sharing Regulations, in vogue. Transmission Tariff for 2024-29 as per above, shall be recovered as per Regulation 78 of CERC Tariff Regulations, 2024 and CERC Sharing Regulations, in vogue.
- 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.

#### PRAYER:

# 25. 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.

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

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

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

FILED BY

GURGAON

DATED: 30.07.2024

POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

Zafrul Hasan

General Manager (Commercial)

# THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

P	ET	ΙT	10	N	NO	.:	 	 		_	_
-	_			-			 -	 - 7	-	-	ж

## 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 Asset under LILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System" in Eastern Region under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

Power Grid Corporation of India Ltd.

---PETITIONER

Registered office: B-9, Qutab Institutional Area,

Katwaria Sarai, New Delhi. - 110 016.

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

Bihar State Power (Holding) Company Ltd. Vidyut Bhayan, Bailey Road.

---RESPONDENT

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

And others

# **AFFIDAVIT VERIFYING THE PETITION**

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

- 1. That the deponent is the General Manager of Petitioner and is well conversant with the facts and the circumstances of the case and therefore competent to swear this affidavit.
- 2. That the accompanying Petition under Section 62 of the Electricity Act, 2003, has been filed by my authorised representative/nominated counsel under my instruction and the contents of the same are true and correct to the best of my knowledge and belief.
- 3. That the contents of Para 01 to 25 of the facts as mentioned in the Petition are true and correct based on the my personal knowledge, belief and records maintained in the office and the contents of Para 01 to 25 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

### **VERIFICATION**

Solemnly affirmed at Gurgaon on this 30 day of Jul'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

MAHENDERS PUN

ADVOCATE & NOTARY
Diet: Gurugram (Haryana) India



# पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड

भारत सरकार का लहाम)

# **POWER GRID CORPORATION OF INDIA LIMITED**

(A Government of India Enterprise)

# पावर ग्रिड कॉरपोरेशन ऑफ इन्डिया लिमिटेड केन्द्रीय वाणिज्यिक विभाग

Ref: CC/Commercial/2022

Date:-13.12.2022

### LETTER OF AUTHORIZATION

Pursuant to the POWER OF ATTORNEY dated 08.12.2022 and in supersession of the letters of authorization dated 19.07.2022, I hereby authorize the following Executives to sign on Vakalatnama, Affidavits and to appear and conduct case proceedings on behalf of the company before CERC, SERC, APTEL, High Courts and Supreme Court.

- 1. Sh. S.S Raju, CGM (Commercial)
- 2. Sh. V. Srinivas, CGM (Commercial BCD)
- 3. Sh. Mohd Mohsin, Sr. GM (Commercial)
- 4. Sh. Bipin Bihari Rath, Sr.GM (Commercial)
- 5. Sh. V.C Shekhar, GM (Regulatory Cell)
- 6. Sh. Zafrul Hasan, Sr. DGM (Commercial)

Mukesh Khanna

ED (Commercial &RC)

CORPORATA ON THE STATE OF THE S

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

पंजीकृत कार्यालय : बी–९, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली–110016 011-26560112, 26564812, 26564812, 26564892, सीआईएन : L40101DL1989GOI038121 Registered Office : B-9, Qulab Institution Area, Katwaria Sarai, New Delhi-110016. Tel.: 011-26560112, 26564812, 26564812, 26564892, CIN : L40101DL1989GOI038121 Website : www.powergridindia.com

# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

# Petition No. 332/TT/2019

Coram:

Shri P.K. Pujari, Chairperson Shri I.S. Jha, Member Shri Arun Goyal, Member Shri Pravas Kumar Singh, Member (Law) Shri P. S. Mhaske, Member (Ex-officio)

Date of order: 25.04.2021

#### In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999, revision of transmission tariff for the 2004-09 and 2009-14 tariff periods and truing up of transmission tariff for the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for LILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System" in the Eastern Region.

#### And in the matter of:

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

.....Petitioner

Vs.

- Bihar State Power (Holding) Company Ltd., (Formerly Bihar State Electricity Board - BSEB), Vidyut Bhavan, Bailey Road, Patna - 800 001.
- West Bengal State Electricity Distribution Company Ltd., Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II, Salt Lake City, Calcutta - 700 091.
- 3. Grid Corporation of Orissa Ltd., Shahid Nagar, Bhubaneswar - 751 007.

Order in Petition No. 332/TT/2019



- Jharkhand State Electricity Board, In Front of Main Secretariat, Doranda, Ranchi – 834002.
- Damodar Valley Corporation,
   DVC Tower, Maniktala,
   Civic Centre, VIP Road, Calcutta 700 054.
- 6. Power Department, Govt. of Sikkim, Gangtok - 737 101.

...Respondents

For Petitioner

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

Shri Ved Prakash Rastogi, PGCIL

For Respondents:

Shri Arijit Maitra, Advocate, GRIDCO

# ORDER

The instant petition has been filed by the Petitioner, Power Grid Corporation of India Ltd., a deemed transmission licensee, for revision of tariff for the 2004-09 and 2009-14 tariff periods, truing up of transmission tariff for the 2014-19 tariff 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 for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the following asset:

LILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli (hereinafter referred to as "the transmission asset") under "Integration of Sikkim Transmission System" in the Eastern Region.

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



OF INDIA SECTION AND SECTION A

- "1) Approve the revised Transmission Tariff for 2001-04 block, 2004-09 block and transmission tariff for 2009-14 block for the assets 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.
- Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70
   (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
- 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the beneficiaries 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 therespondents.
- 7) Allow the petitioner to recover FERV on the foreign loans deployed as provided under clause 68 of the Tariff Regulations, 2019
- 8) 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.
- 9) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

### **Background**

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



Order in Petition No. 332/TT/2019



Page 3 of 47

- a) The Investment Approval (IA) for the transmission asset was accorded by the Board of Directors of the Petitioner Company vide letter dated 22.10.2002 at an estimated cost of ₹511 lakh including IDC of ₹36 lakh.
- b) The transmission tariff from COD to 31.3.2009 with respect to the transmission asset was determined vide order dated 15.2.2008 in Petition No. 21/2007, which was further revised vide order dated 1.4.2009 in Petition No. 143/2008 on account of Additional Capital Expenditure (ACE) incurred during 2006-07 and 2007-08.
- c) The transmission tariff from 1.4.2009 to 31.3.2014 with respect to the transmission asset was determined vide order dated 15.3.2011 in Petition No. 190/2010. Further, the tariff for the 2009-14 period was trued up and tariff for the period from 1.4.2014 to 31.3.2019 was determined vide order dated 30.12.2015 in Petition No. 390/TT/2014 and the transmission tariff based on truing up claimed by the Petitioner in the instant petition is as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges approved vide order dated 30.12.2015 in Petition No. 390/TT/2014	107.01	107.88	108.83	109.88	99.65
AFC claimed by the Petitioner based on truing up in the instant Petition	108.37	109.33	110.27	111.35	101.75

- d) The transmission asset was scheduled to be commissioned by October 2004 against which it was put under commercial operation on 1.10.2005 with delay of 11 months and the same was considered to be beyond the control of Petitioner vide order dated 15.2.2008 in Petition No. 21 of 2007.
- e) The Petitioner has sought revision of transmission tariff approved for the 2004-09 tariff period, w.e.f 1.10.2005, 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 judgments of the Appellate Tribunal for Electricity (APTEL) dated 22.1.2007 and dated 13.6.2007 in Appeal No. 81/2005 and batch and Appeal No. 139/2006 and batch respectively. The Petitioner has sought consequential revision of tariff allowed for the 2009-14 tariff period and



Order in Petition No. 332/TT/2019

truing up of tariff of 2014-19 tariff period and determination of tariff for 2019-24 tariff period for the transmission asset.

- f) APTEL, vide judgement dated 22.1.2007 in Appeal No. 81/2005 and other related Appeals, and judgement dated 13.6.2007 in Appeal No. 139/2006 pertaining to generating stations of NTPC decided mainly on the following issues:
  - (a) Computation of interest on loan
  - (b) Consequences of refinancing of loan
  - (c) Depreciation as deemed repayment
  - (d) Admissibility of depreciation up to 90% of the value of the assets
  - (e) Consideration of maintenance of spares for working capital
  - (f) Depreciation of assets.
- 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 the APTEL's judgments dated 22.1.2007 in Appeal No. 81/2005 and dated 13.6.2007 in Appeal No. 139/2006, the Petitioner herein sought re-determination of tariff of its transmission asset for the 2004-09 tariff period 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 thesame be revived after the disposal of Civil Appeals by the Hon'ble Supreme Court.
- i) The Hon'ble Supreme Court vide its judgment dated 10.4.2018, dismissed the said Civil Appeals filed by the Commission and others against the APTEL's judgments dated 22.1.2007 and dated 13.6.2007 in Appeal No. 81/2005 and batch and Appeal No. 139/2006 and batch respectively.
- j) Consequent to the Hon'ble Supreme Court's judgment dated 10.4.2018 in Civil Appeal No. 5622 of 2007 alongwith other Civil Appeals in NTPC matters, the Petition No. 121/2007 was listed for hearing before the Commission 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 period 2014-19 in respect of the concerned transmission assets. Accordingly, the Petitioner has filed its claim for revision of tariff for 2004-09 and 2009-14 periods in the instant Petition.
- k) The instant petition was heard on 10.3.2021 and in view of the APTEL's judgments dated 22.1.2007 and dated 13.6.2007 in Appeal No. 81/2005 and batch and Appeal No. 139/2006 and batch respectively and the judgement of Hon'ble Supreme Court dated 10.4.2018 in Civil Appeal No. 5622 of 2007 alongwith other Civil Appeals, the tariff is being revised. Although, period wise tariff is being re-worked based on the Tariff Regulations applicable for the respective tariff periods, suitable assumptions at certain places, if any, are being applied which are being indicated.
- 1) The transmission asset was put under commercial operation during 2004-09 period. The tariff of the transmission asset for the 2004-09 and 2009-14 periods was worked out based on the admitted capital cost of the transmission asset as on COD and ACE admitted during the 2004-09 period. Accordingly, considering the admitted capital cost as on COD and ACE admitted during the 2004-09 period, tariff is being revised for the 2004-09 and 2009-14 tariff periods in terms of APTEL's judgements dated 22.1.2007 and dated 13.6.2007. The details of admitted capital cost as on COD and ACE admitted during the 2004-09 period for the transmission asset are as under:

(₹ in lakh)

	Admitted Capital	ACE				
Description	Cost as on COD	2005-06	2006-07	2007-08	2008-09	
LILO of Siliguri- Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli	280.16	15.67	13.68	15.80	0.00	





- 4. The Respondents are distribution licensees, transmission utilities and power departments, who are procuring transmission services from the Petitioner, mainly beneficiaries of the Eastern Region.
- 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 notices published in the newspapers by the Petitioner. Bihar State Power (Holding) Company Ltd. (BSPHCL), i.e. Respondent No. 1 has filed its reply vide affidavit dated 3.12.2020 and has raised the issues of revision of tariff claimed by the Petitioner on account of change in IoL and Interest on Working Capital (IWC) in light of the APTEL judgement dated 22.1.2007 and dated 13.6.2007 in Appeal No. 81/2005 and batch and Appeal No. 139/2006 and batch respectively and effective tax rate considered for calculation of Return on Equity (RoE). In response to the issues raised by BSPHCL, the Petitioner has filed rejoinder vide affidavit dated 8.3.2021. No reply was filed by GRIDCO despite time sought and granted by the Commission.
- 6. The hearing in this matter was held on 10.3.2021 through video conference and order was reserved.
- 7. Having heard the representatives of the Petitioner, learned counsel of BSPHCL and having perused the material on record, we proceed to dispose of the petition.
- 8. This order is issued considering the submissions made by the Petitioner in the petition dated 31.7.2019, Petitioner's affidavit dated 30.7.2020, reply of BSPHCL filed





vide affidavit dated 3.12.2020 and rejoinder to the reply of BSPHCL filed vide affidavit dated 8.3.2021.

# REVISION OF TRANSMISSION CHARGES FOR THE 2004-09 AND 2009-14 TARIFF PERIODS

- The Petitioner has sought revision of tariff on the account of the computation of 9. IoL, Maintenance spares for working capital and depreciation allowed for the 2004-09 period based on the judgement of APTEL dated 22.1.2007 in Appeal No. 81/2005 and batch and dated 13.6.2007 in Appeal No. 139/2006 and batch. APTEL while dealing with the issue of computation of IoL, vide its judgement dated 22.1.2007 in Appeal No. 81/2005 and batch, observed that the period from 1.4.1998 to 31.3.2001 shall be computed only on normative loan repayment as per its judgement dated 14.11.2006 in Appeal Nos. 94 and 96 of 2005. APTEL vide judgement dated 14.11.2006 in Appeal Nos. 94 and 96 of 2005 had set aside the Commission's methodology of computation of loan on the basis of actual repayment or normative repayment whichever is higher and held that the Commission is required to adopt normative debt repayment methodology for working out the IoL liability for the period 1.4.1998 to 31.3.2001. In view of the above, the interest allowed for the 2004-09 period is being revised on the basis of the normative debt repayment methodology. Relevant portion of the judgement dated 14.11.2006 in Appeal Nos. 94 and 96 of 2005 is as under:
  - "12. We have heard the arguments of the Senior Counsel(s) of appellant and respondents. We notice that the appellant has not challenged the formula for computing the annual repayment amount as provided in Appeal No. 96 of 2005 & IA No.117 of 2006 in Appeal No. 94 of 2005 para-22 of the impugned order and has only challenged the provisions at para 23 specifying that the amount of annual repayment for calculation of interest on loan is chosen higher of the normative debt and actual debt.
  - As mentioned earlier the servicing of the capital (equity or debt) is financed by the recovery of interest on debt capital and through earning of return on equity capital. The actual loan repayment has been normalized to 50% of the total capital by the formula in para 22 of the impugned order given in para 11 above. Once it has been decided and agreed that the financing plan would be based on normative

Page 8 of 47



Order in Petition No. 332/TT/2019

- debt-equity ratio of 50:50 and not the actual debt-equity ratio, the same normative basis should be adopted for recovery of cost of servicing the capital.
- 14. In the instant case since the normative debt-equity ratio of 50:50 has been adopted in the financing plan, the loan repayment should be computed based on normative debt. This is to ensure that whatever normative debt has been considered, tariff should ensure the recovery of the same normative debt and interest thereon.
- 18. In its Tariff Regulation of 2004 the Central Commission perhaps recognizing the aforesaid anomaly has dispensed with the practice of adopting higher of actual or normative repayment and has corrected the method of determination of quantum of debt repayment only on the basis of the normative debt with effect from 01.04.2004
- 19. In view of the above, the Central Commission is required to adopt normative debt repayment methodology for working out the interest on loan liability for the period 01.04.1998 to 31.03.2001."
- 10. APTEL vide judgement dated 13.6.2007 in Appeal No. 139 of 2006 and Ors. held that additional capitalisation after the date of commercial operation should also be considered for computation of maintenance spares as under:

# "Analysis and Decision

We are not inclined to agree with the contention of the respondents that escalation of 6% will take care of the additional capitalization. Escalation is meant to factor inflation and is allowed as per CERC Regulations whether or not additional capitalization takes place. Question before us is that: can the historical cost be frozen with the Commissioning of the station. It is quite normal and prudent to ensure earliest operation of the plant without necessarily 100% completion of plants and works, of course not at the cost of safety of the plant. Adding some of the plants and works after the commercial operation will reduce interest during construction. If technically it is possible to delay some of the plants or works, it is only prudent to do so. For example it is common to build redundancies in the plant at a little later stage. CERC's own regulations rightly recognized additional capitalization. It is pertinent to set out excerpts pertaining to additional capitalization from CERC (Terms & Conditions of Tariff) Regulation, 2004 Clause 18 as below:-

"Additional capitalization (1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission, subject to prudence check:

- (i) Deferred liabilities
- (ii) Works deferred for execution
- (iii) Procurement of initial capital spares in the original scope of work, subject to ceiling specified in regulation 17.
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) On account of change in law.

Provided that original scope of work along with estimates of expenditure shall be submitted along with the application for provisional tariff.



Order in Petition No. 332/TT/2019

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the generating station."

It is clear from the abovementioned Clause 18 of the CERC Regulations that additional capitalization after the date of commercial operation is recognized as part of the capital expenditure Historical cost does not literally mean that the cost on the date of the commercial operation. The term historical cost is used so as to distinguish it from 'book value' or 'the replacement cost'. The cost of maintenance spares limited to 1% of the historical cost corresponds to the plant and equipment and installations which are required to be maintained. If the cost of additional equipment is not included in the historical cost, how spares for the additional equipment be procured for maintenance of the additional equipment. In this view of the matter, the CERC needs to examine afresh in the light of the aforesaid observations."

- 11. In view of the above, the Maintenance spares to be considered for computation of working capital for the 2004-09 period are also required to be revised taking into consideration the additional capitalisation after the date of commercial operation.
- 12. With regard to depreciation, APTEL in its judgement dated 13.6.2007 in Appeal No. 139 of 2006 and batch 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. The relevant portion of the judgement is as under:

#### "Analysis and Decision

In the orders of this Tribunal dated November 14, 2006 and January 24, 2007 it has been laid down that the computation of outstanding loan will be on normative basis only (instead of normative or actual whichever is higher). In view of this there is no question of any adjustment of the depreciation amount as deemed repayment of loan.

It is to be understood that the depreciation is an expense and not an item allowed for repayment of loan. If a corporation does not borrow, it would not mean that the corporation will not be allowed any depreciation. Depreciation is an expense it represents a decline in the value of asset because of use, wear or obsolescence. The Accounting Principles Board of USA defines depreciation as under:-

"The cost of a productive facility is one of the costs of the service it renders during its useful economic life. Generally accepted accounting principles require that this cost be spread over the expected useful life of the facility in such a way as to allocate it as equitably as possible to the periods during which services are obtained from the use of the facility. This procedure is known as depreciation accounting, a system of accounting which aims to distribute the cost or other basic value of tangible capital assets, less salvage (if any), over the estimated



useful life of the unit (which may be a group of assets) in a systematic and rational manner. It is a process of allocation, not of valuation"

It is well established that the depreciation is an expense and therefore, it cannot be deployed for deemed repayment of loan. In this view of the matter the CERC shall need to make a fresh computation of outstanding loan in the light of the aforesaid observations."

- 13. Accordingly, in view of the above directions of APTEL, the outstanding loan allowed for the transmission asset for the 2004-09 period is revised in the instant order.
- 14. The revision of tariff allowed for the 2004-09 tariff period necessitates the revision of tariff allowed for the 2009-14 period, which is also being done vide the instant order. The implementation of the directions of APTEL in case of the Petitioner was kept pending for the outcome of Civil Appeals filed before the Hon'ble Supreme Court. Hence, 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 the 2004-09 and 2009-14 tariff periods. Therefore, the Petitioner will neither claim nor pay any carrying cost from the beneficiaries for the difference, if any, in the tariff allowed earlier and that allowed vide 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.

#### 2004-09 Period

15. The Commission vide orders dated 15.2.2008 and dated 1.4.2009 in Petition Nos. 21/2007 and 143/2008 respectively approved the following transmission charges for the transmission asset for the 2004-09 period:





(₹ in lakh)

Particulars	2005-06	2006-07	2007-08	2008-09
Depreciation	5.21	10.80	11.18	11.38
Interest on Loan	7.21	14.69	14.77	14.12
Return on Equity	5.43	11.47	12.09	12.42
Advance against Depreciation	0.00	0.00	0.00	7.55
Interest on Working Capital	1.23	2.56	2.66	2.88
O&M Expenses	29.84	62.07	64.54	67.13
Total	48.92	101.59	105.24	115.48

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

(₹ in lakh)

Particulars	2005-06	2006-07	2007-08	2008-09
Depreciation	5.21	10.80	11.18	11.38
Interest on Loan	7.30	15.43	16.05	15.49
Return on Equity	5.43	11.47	12.09	12.42
Advance against Depreciation	0.00	0.00	0.00	0.00
Interest on Working Capital	1.24	2.60	2.73	2.82
O&M Expenses	29.84	62.07	64.54	67.13
Total	49.02	102.37	106.59	109.24

- 17. BSPHCL has submitted that the revision of tariff claimed by the Petitioner for the 2004-09 period and subsequently in the 2009-14 period on account of change in IoL and IWC in light of APTEL judgement dated 22.1.2007 in Appeal Nos. 81/2005 and batch and dated 13.6.2007 in Appeal No. 139/2006 and batch may be allowed after due prudence check by the Commission.
- 18. We have considered the submissions of the Petitioner and BSPHCL. The tariff is allowed for the transmission asset based on the following:
  - a) Admitted capital as on COD cost for transmission asset as stated above;
  - b) Weighted Average Rate of Interest on actual loan adopted from orders dated 15.2.2008 and dated 1.4.2009 in Petition Nos. 21/2007 and 143/2008 respectively;



- With respect to calculation of IoL, Regulation 56(i)(f) of the 2004 Tariff c) Regulations provide as under:
  - "56 (i) (f) Interest on Loan Capital (f)In case any moratorium period is availed of by the transmission licensee. depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly;"
- Weighted Average Rate of Depreciation, Rate of Interest for Working d) Capital and O&M Expenses as per orders dated 15.2.2008 and dated 1.4.2009 in Petition Nos. 21/2007 and 143/2008 respectively; and
- Maintenance spares component for calculating IWC is adjusted with e) reference to ACE as approved for the transmission asset from COD to 2009 in orders dated 15.2.2008 and dated 1.4.2009 in Petition Nos. 21/2007 and 143/2008 respectively and as summarised above.
- In view of the above, revised transmission charges allowed for the transmission 19. asset for the 2004-09 tariff period are as under:

(₹ in lakh)

Particulars	2005-06 (Pro-rata for 6 months)	2006-07	2007-08	2008-09
Depreciation	5.21	10.80	11.18	11.38
Interest on Loan	7.21	14.69	14.94	14.44
Return on Equity	5.43	11.47	12.09	12.42
Advance against Depreciation	0.00	0.00	0.00	3.20
Interest on Working Capital	1.24	2.59	2.71	2.86
O&M Expenses	29.84	62.07	64.54	67.13
Total	48.92	101.61	105.44	111.43

#### 2009-14 Period

20. The Commission vide order dated 15.3.2011 in Petition No. 190/2010 approved the tariff for the transmission asset for the 2009-14 period and vide order dated 30.12.2015 in Petition No. 390/TT/2014 trued up the tariff allowed for the 2009-14



period which was earlier allowed vide order dated 15.3.2011 in Petition No. 190/2010 and the same is as follows:

(₹ in lakh)

					1
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	17.53	17.53	17.53	17.53	17.53
Interest on Loan	12.85	11.63	10.39	9.16	7.92
Return on Equity	16.57	17.17	17.19	17.19	17.40
Interest on Working Capital	3.63	3.77	3.91	4.05	4.21
O&M Expenses	53.07	56.11	59.31	62.72	66.30
Total	103.66	106.22	108.33	110.65	113.36

21. The Petitioner has claimed the following revised transmission charges for the transmission asset for the 2009-14 period in this petition:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	17.53	17.53	17.53	17.53	17.53
Interest on Loan	14.16	12.93	11.70	10.47	9.23
Return on Equity	16.57	17.17	17.19	17.19	17.40
Interest on Working Capital	3.66	3.80	3.93	4.08	4.24
O&M Expenses	53.07	56.11	59.31	62.72	66.30
Total	104.99	107.54	109.66	111.99	114.70

- 22. We have considered the Petitioner's claim. The tariff is allowed for the transmission asset based on the following:
  - a) Admitted capital cost of ₹325.31 lakh as on 1.4.2009 for transmission asset and no ACE during 2009-14 period;
  - b) Weighted Average Rate of Interest on actual loan derived/adopted from order dated 30.12.2015 in Petition No.390/TT/2014; and
  - c) Weighted Average Rate of Depreciation as per order dated 30.12.2015 in Petition No. 390/TT/2014.
- 23. In view of the above, the revised transmission charges allowed for the transmission asset for the 2009-14 tariff period are as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	17.53	17.53	17.53	17.53	17.53



Interest on Loan	13.16	11.94	10.70	9.47	8.23
Return on Equity	16.57	17.17	17.19	17.19	17.40
Interest on Working Capital	3.64	3.78	3.91	4.06	4.22
O&M Expenses	53.07	56.11	59.31	62.72	66.30
Total	103.98	106.53	108.64	110.97	113.69

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

24. The Commission vide order dated 30.12.2015 in Petition No. 390/TT/2014 has approved the tariff for the 2014-19 period as follows:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	17.53	17.53	17.53	17.53	5.92
Interest on Loan	6.69	5.46	4.23	3.02	2.31
Return on Equity	17.40	17.40	17.40	17.40	17.40
Interest on Working Capital	4.33	4.41	4.50	4.59	4.43
O&M Expenses	61.06	63.08	65.17	67.34	69.59
Total	107.01	107.88	108.83	109.88	99.65

- 25. The Petitioner has submitted the information as required under the 2014 Tariff Regulations for truing up of annual fixed charges for the 2014-19 period. The tariff for the 2014-19 period has been trued up as discussed in the subsequent paragraphs.
- 26. The details of the transmission charges claimed by the Petitioner are as under:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	17.54	17.54	17.54	17.54	6.43
Interest on Loan	8.00	6.77	5.55	4.36	3.72
Return on Equity	17.41	17.49	17.48	17.48	17.53
Interest on Working Capital	4.36	4.45	4.53	4.63	4.48
O&M Expenses	61.06	63.08	65.17	67.34	69.59
Total	108.37	109.33	110.27	111.35	101.75

27. The details of the trued up IWC claimed by the Petitioner are as under:

				(₹ in lakh)
2014-15	2015-16	2016-17	2017-18	2018-19
5.09	5.26	5.43	5.61	5.80
9.16	9.46	9.78	10.10	10.44
18.06	18.22	18.38	18.56	16.96
	5.09 9.16	5.09 5.26 9.16 9.46	5.09     5.26     5.43       9.16     9.46     9.78	5.09     5.26     5.43     5.61       9.16     9.46     9.78     10.10



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	5.09	5.26	5.43	5.61	5.80
Total	32.31	32.94	33.59	34.27	33.20
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	4.36	4.45	4.53	4.63	4.48

### Capital Cost as on 1.4.2014

28. The capital cost of the transmision asset has been calculated in accordance with the Regulation 9(3) and Regulation 9(6) of 2014 Tariff Regulations. The Commission vide order dated 30.12.2015 in Petition No. 390/TT/2014 had approved the transmission tariff for the transmission asset for the 2014-19 period based on admitted capital cost of ₹325.31 lakh as on 1.4.2014. The Petitioner has not claimed any ACE during the 2014-19 tariff period. Accordingly, the capital cost of ₹325.31 lakh has been considered for the purpose of truing up of the tariff for the 2014-19 tariff period.

### **Debt-Equity Ratio**

29. The debt-equity ratio has been allowed in accordance with Regulation 19(3) of the 2014 Tariff Regulations. 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 debt-equity ratio of 72.73:27.27 for the period ending on 31.3.2014, has been considered for the purpose of determination of tariff of the 2014-19 tariff period and truing up of the tariff of the transmission asset for the 2014-19 tariff period. The details of the debt-equity ratio as on 1.4.2014 and 31.3.2019 of the transmission asset is as under:

Funding	Capital cost as on 1.4.2014 (₹ in lakh)	(%)	Total cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	236.61	72.73	236.61	72.73



Order in Petition No. 332/TT/2019.

Page 16 of 47

Total	325.31	100.00	325.31	100.00
Equity	88.70	27.27	88.70	27.27

### **Depreciation**

30. The depreciation has been worked out as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during the 2014-19 tariff period. The Gross Block during the 2014-19 tariff period 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 the 2014-19 period for the transmission asset is as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	325.31	325.31	325.31	325.31	325.31
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	325.31	325.31	325.31	325.31	325.31
Average Gross Block	325.31	325.31	325.31	325.31	325.31
Weighted average rate of Depreciation (WAROD) (%)	5.39	5.39	5.39	5.39	Spread
Balance useful life of the asset at the beginning of the year	19.00	18.00	17.00	16.00	15.00
Aggregated Depreciable Value	292.78	292.78	292.78	292.78	292.78
Depreciation during the year	17.53	17.53	17.53	17.53	6.21
Cumulative Depreciation at the end of the year	146.96	164.50	182.03	199.57	205.78
Remaining Depreciable value at the end of the year	145.81	128.28	110.75	93.21	87.00

31. Accordingly, the depreciation approved earlier vide order dated 30.12.2015 in Petition No. 390/TT/2014, depreciation claimed in the instant petition for the 2014-19 period and allowed after true up of the 2014-19 period with respect to the transmission asset is as under:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Approved earlier vide order dated 30.12.2015 in Petition No. 390/TT/2014	17.53	17.53	17.53	17.53	5.92	
Claimed by the Petitioner in the instant Petition	17.54	17.54	17.54	17.54	6.43	
Allowed after true-up in this order	17.53	17.53	17.53	17.53	6.21	

# Interest on Loan (IoL)

- IoL has been worked out in accordance with Regulation 26 of the 2014 Tariff 32. Regulations. The Petitioner has claimed IoL based on actual interest rates for each year during the 2014-19 period. The Petitioner has considered the weighted average rate of loL on the basis of prevailing rates as on 1.4.2014 for respective loans and has prayed to consider the floating rate of interest applicable during the 2014-19 period, if any, during the truing-up of tariff.
- 33. We have considered the submissions of the Petitioner and accordingly loL has been considered based on the actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations.
- The details of the trued up IoL allowed for the transmission asset are as 34. follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	236.61	236.61	236.61	236.61	236.61
Cumulative Repayments up to Previous Year	129.43	146.96	164.50	182.03	199.57
Net Loan-Opening	107.18	89.65	72.11	54.58	37.04
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	17.53	17.53	17.53	17.53	6.21
Net Loan-Closing	89.65	72.11	54.58	37.04	30.83
Average Loan	98.41	80.88	63.34	45.81	33.94
Weighted Average Rate of Interest on Loan (%)	7.11	7.13	7.17	7.28	7.77
Interest on Loan	7.00	5.77	4.54	3.34	2.64





35. Accordingly, loL approved earlier vide order dated 30.12.2015 in Petition No. 390/TT/2014, loL claimed in the instant petition for the 2014-19 period and allowed after true up for the 2014-19 period with respect to the transmission asset is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved earlier vide order dated					
30.12.2015 in Petition No.	6.69	5.46	4.23	3.02	2.31
390/TT/2014					
Claimed by the Petitioner in the	0.00	6 77	5 5 5	4.36	3.72
instant petition	8.00	6.77	5.55	4.30	3.72
Allowed after true-up in this order	7.00	5.77	4.54	3.34	2.64

## Return on Equity (RoE)

36. The Petitioner has claimed RoE for 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 the 2014-19 tariff period:

Year	Claimed effective tax (%)	Grossed up RoE [Base Rate/(1-t)] (%)
2014-15	21.018	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757

37. BSPHCL in its reply has submitted that the Petitioner has not specified whether the tax and interest paid by the Petitioner is after adjustment of any refund of tax including interest received, if any and is also exclusive of penalty on account of late payment of tax or short deposit of tax. BSPHCL has further submitted that truing up of grossed up rate of RoE has to be done on the basis of actual taxes paid every year during the 2014-19 period and that the 2014 Tariff Regulations do not allow for



claiming any differential tariff arising out of truing up of grossed up RoE directly from the beneficiaries.

- 38. In response, the Petitioner has submitted that in various orders such as order dated 18.4.2020 in Petition No. 247/TT/2019, order dated 27.4.2020 in Petition No. 274/TT/2019, order dated 23.4.2020 in Petition No. 245/TT/2019 and in order dated 16.4.2020 in Petition No. 307/TT/2019, the Commission has considered the effective tax rate based on notified MAT rates for grossing up of rate of RoE. The Petitioner, further submitted that it can be allowed to claim the differential tariff on account of the trued up RoE based on the effective tax rate as calculated in the aforementioned petitions and Income Tax Assessment/ re-assessment for 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19, on year to year basis, directly from the beneficiaries. Further, the Income Tax Assessment for 2017-18 and 2018-19 has not yet been completed.
- We have considered the submissions of the Petitioner and BSPHCL. The 39 Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates. The relevant portion of the order dated 27.4.2020 is as under:

"26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing-up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. Any under-recovery or over-recovery of grossed up rate on return on equity



Order in Petition No. 332/TT/2019

Page 20 of 47

after truing-up, shall be recovered or refunded to beneficiaries or the long term transmission customers/ DICs as the case may be on year to year basis.

27. Accordingly, following effective tax rates based on notified MAT rates are considered for the purpose of grossing up of rate of return on equity:

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

40. The same MAT rates as considered in the 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 the 2014-19 period in terms of the provisions of the 2014 Tariff Regulations which is as under:

Year	Notified MAT rates (inclusive of surcharge & cess) (in %)	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

41. Accordingly, RoE allowed for the transmission asset is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Opening Equity	88.70	88.70	88.70	88.70	88.70	
Addition due to ACE	0.00	0.00	0.00	0.00	0.00	
Closing Equity	88.70	88.70	88.70	88.70	88.70	
Average Equity	88.70	88.70	88.70	88.70	88.70	
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50	
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549	
Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758	
Return on Equity (Pretax)	17.39	17.48	17.48	17.48	17.53	





42. Accordingly, RoE approved vide order dated 30.12.2015 in Petition No. 390/TT/2014, RoE claimed in the instant petition for the 2014-19 period and allowed after true up of the 2014-19 period with respect to the transmission asset is as under:

(₹ in lakh) **Particulars** 2014-15 2015-16 2016-17 2017-18 2018-19 Approved earlier vide order dated 30.12.2015 in Petition 17.40 17.40 17.40 17.40 17.40 No. 390/TT/2014 Claimed by the Petitioner in 17.41 17.49 17.48 17.48 17.53 the instant Petition Allowed after true-up in this 17.48 17.48 17.48 17.39 17.53 order

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

43. The O&M Expenses claimed by the Petitioner and allowed as per Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of computation of tariff are the same and are as under:

(₹ in lakh)

### O&M Expenses claimed for:

### **Transmission Line**

• LILO of Siliguri Gangtok at MELLI-2.5 kms.

#### 132 kV AIS Sub-station Bays

- · Gangtok Bay 1 Bay
- 132 kV Sub-station 1 Bay

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Norm (₹ lakh/bay)					
132 kV Bay (AIS)	30.15	31.15	32.18	33.25	34.36
Number of bays					
132 kV Bay (AIS)	2.00	2.00	2.00	2.00	2.00
	************	***			
O&M for HV and DC Lines (₹ lak	(h/km)				
Double Circuit (Single Conductor) Transmission Line	0.303	0.313	0.324	0.334	0.346
Line Length in km.		*		-	
LILO of Siliguri Gangtok at MELLI-2.5 kms.	2.50	2.50	2.50	2.50	2.50
Total O&M Expense (Claimed)	61.06	63.08	65.17	67.34	WED 69.59
Total O&M Expense	61.06	63.08	65.17	67.34	69.59



74 A 7507 BD			
(Approved)			
MUDIOVEUI			

44. Accordingly, the O&M Expenses approved vide order dated 30.12.2015 in Petition No. 390/TT/2014, O&M Expenses claimed in the instant petition for the 2014-19 period and allowed after true up of the 2014-19 period with respect to the transmission asset are as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved earlier vide order dated 30.12.2015 in Petition No. 390/TT/2014	61.06	63.08	65.17	67.34	69.59
Claimed by the Petitioner in the instant Petition	61.06	63.08	65.17	67.34	69.59
Allowed after true-up in this order	61.06	63.08	65.17	67.34	69.59

## Interest on Working Capital (IWC)

45. The Petitioner is entitled to claim IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as under. The components of the working capital and the Petitioner's entitlement to interest thereon are discussed hereunder:

# (i) Maintenance Spares:

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses specified in Regulation 28.

## (ii) O & M Expenses:

O&M Expenses have been considered for one month of the allowed O&M Expenses.

### (iii) Receivables:

The receivables have been worked out on the basis of 2 months of annual transmission charges as worked out above.

### (iv) Rate of interest on working capital

Rate of interest on working capital is considered on normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.



46. The trued up IWC has been worked out for the transmission asset as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and allowed as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses (O&M Expenses for 1 Month)	5.09	5.26	5.43	5.61	5.80
Maintenance Spares (15% of O&M)	9.16	9.46	9.78	10.10	10.44
Receivables (Equivalent to 2 months of annual transmission charges)	17.89	18.05	18.21	18.38	16.74
Total Working Capital	32.13	32.77	33.41	34.09	32.97
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	4.34	4.42	4.51	4.60	4.45

47. Accordingly, IWC approved earlier vide order dated 30.12.2015 in Petition No. 390/TT/2014, IWC claimed in the instant petition for the 2014-19 period and allowed after true up of the 2014-19 period with respect to the transmission asset is as under:

(₹ in lakh)

					(X III Idikity
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved earlier vide order dated 30.12.2015 in Petition No. 390/TT/2014	4.33	4.41	4.50	4.59	4.43
Claimed by the Petitioner in the instant Petition	4.36	4.45	4.53	4.63	4.48
Allowed after true-up in this order	4.34	4.42	4.51	4.60	4.45

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

48. The trued up annual fixed charges for the transmission asset for the 2014-19 tariff period are summarised below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017–18	2018-19
Depreciation	17.53	17.53	17.53	17.53	6.21
Interest on Loan	7.00	5.77	4.54	3.34	2.64
Return on Equity	17.39	17.48	17.48	17.48	17.53
Int. on Working Capital	4.34	4.42	4.51	4.60	4.45
Op. and Maintenance	61.06	63.08	65.17	67.34	ov69.59
Total	107.32	108.29	109.23	110.29	100.41



49. Accordingly, the annual transmission charges allowed vide order dated 30.12.2015 in Petition No. 390/TT/2014, as claimed in the instant petition for the 2014-19 period and allowed after true up of the 2014-19 period with respect to the transmission asset are as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved earlier vide order dated 30.12.2015 in Petition No. 390/TT/2014	107.01	107.88	108.83	109.88	99.65
Claimed by the Petitioner in the instant Petition	108.37	109.33	110.27	111.35	101.75
Allowed after true-up in this order	107.32	108.29	109.23	110.29	100.41

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

50. The transmission tariff claimed by the Petitioner for the transmission asset for the 2019-24 tariff period is as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	6.43	6.43	6.43	6.43	6.43
Interest on Loan	3.60	3.04	2.49	1.93	1.37
Return on Equity	17.53	17.53	17.53	17.53	17.53
Int. on Working Capital	1.89	1.93	1.97	2.02	2.07
Op. and Maintenance	33.78	34.94	36.15	37.39	38.68
Total	63.23	63.87	64.58	65.30	66.08

51. The details of IWC claimed by the Petitioner are as under:

(₹ in lakh)

					( III lakii)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	2.82	2.91	3.01	3.12	3.22
Maintenance Spares	5.07	5.24	5.42	5.61	5.80
Receivables	7.77	7.87	7.96	8.05	8.12
Total	15.66	16.02	16.39	16.78	17.14
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	1.89	1.93	1.97	2.02	2.07



Page 25 of 47

# **Capital Cost**

- 52. Regulation 19 of the 2019 Tariff Regulations provides as follows:
  - "19. Capital cost: (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.
  - (2) The Capital Cost of a new project shall include the following:
  - (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
  - (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
  - (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
  - (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
  - (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
  - (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
  - (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
  - (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation:
  - (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
  - (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
  - (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
  - (I) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
  - (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
  - (n) Expenditure on account of change in law and force majeure events; and
  - (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
  - (3) The Capital cost of an existing project shall include the following:
  - (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
  - (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;



- (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."
- (4) The capital cost in case of existing or new hydro generating station shall also include:
- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (5) The following shall be excluded from the capital cost of the existing and new projects:
- (a) The assets forming part of the project, but not in use, as declared in the tariff petition;
- (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be 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 assets.

- (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."
- 53. The capital cost of ₹325.31 lakh has been considered by the Commission for the transmisison asset as on 31.3.2019. The Petitioner has not claimed any ACE





during the 2019-24 period. Therefore, the capital cost of ₹325.31 lakh as on 31.3.2019 has been considered for the purpose of determination of transmission tariff for the 2019-24 period in accordance with Regulation 19 of the 2019 Tariff Regulations.

### **Debt-Equity Ratio**

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

#### Provided that:

- where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ίί. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- any grant obtained for the execution of the project shall not be iii. considered as a part of capital structure for the purpose of debt: equity ratio.
- (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."
- 55. The debt-equity ratio for the 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 the 2019-24 tariff period is as follows:

Particulars	Capital cost as on 1.4.2019 (₹ in lakh)	(%)	Capital cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	236.61	72.73	236.61	72.73
Equity	88.70	27.27	88.70	27.27
Total	325.31	100.00	325.31	100.00

### **Depreciation**

- 56. Regulation 33 of the 2019 Tariff Regulations provides as follows:
  - "33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

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

- (2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.
- (3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as





NIL and 100% value of the assets shall be considered depreciable;

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

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

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

- (4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-I** to these regulations for the assets of the generating station and transmission system:

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

- (6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.
- (7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.
- (8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services."
- 57. BSPHCL has submitted that the claim of the Petitioner for depreciation may be considered as per Regulation 33(5) of the 2019 Tariff Regulations.
- 58. We have considered the submissions of the Petitioner and BSPHCL. The depreciation has been worked out considering the admitted capital expenditure as on



31.3.2019 and accumulated depreciation up to 31.3.2019 and weighted average rate of depreciation (WAROD). WAROD has been worked out and placed as Annexure-2 after taking into account the depreciation rates as prescribed in the 2019 Tariff Regulations. The depreciation allowed for the transmission asset is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	325.31	325.31	325.31	325.31	325.31
Addition during the year 2019-24 due to projected Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	325.31	325.31	325.31	325.31	325.31
Average Gross Block	325.31	325.31	325.31	325.31	325.31
Weighted average rate of Depreciation (WAROD)(%)	Spread	Spread	Spread	Spread	Spread
Balance useful life at the beginning of the year	14.00	13.00	12.00	11.00	10.00
Aggregated Depreciable Value	292.78	292.78	292.78	292.78	292.78
Combined Depreciation during the year	6.21	6.21	6.21	6.21	6.21
Cumulative Depreciation at the end of the year	212.00	218.21	224.42	230.64	236.85
Remaining Aggregate Depreciable Value at the end of the year	80.78	74.57	68.36	62.14	55.93

### Interest on Loan (IoL)

- The weighted average rate of loL has been considered on the basis of actual rate of interest as submitted by the Petitioner for the 2019-24 tariff period. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted during the tariff period from/with the beneficiaries. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up.
- 60. BSPHCL has submitted that there is no provision in the 2019 Tariff Regulations which supports the claim of floating rate of interest, to be directly adjusted/ claimed with the beneficiaries. In response, the Petitioner has reiterated its submission and



Page 31 of 47

submitted that for the 2019-24 tariff period the IoL has been calculated on the basis of interest rates prevailing as on 1.4.2019.

We have considered the submissions of BSPHCL and the Petitioner. loL has 61. been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. The loL allowed is as follows:

(₹ in lakh)

					( III Ididii)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	236.61	236.61	236.61	236.61	236.61
Cumulative Repayments up to Previous Year	205.78	212.00	218.21	224.42	230.64
Net Loan-Opening	30.83	24.61	18.40	12.19	5.97
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Repayment during the year	6.21	6.21	6.21	6.21	5.97
Net Loan-Closing	24.61	18.40	12.19	5.97	0.00
Average Loan	27.72	21.51	15.29	9.08	2.99
Weighted Average Rate of Interest on Loan (%)	8.680	8.680	8.680	8.680	8.680
Interest on Loan	2.41	1.87	1.33	0.79	0.26

# Return on Equity (RoE)

- 62. Regulations 30 and 31 of the 2019 Tariff Regulations provide as under:
  - "30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.
  - (2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and runof 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 by1.00% 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;

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 issuedbyNationalLoad 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 below:

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

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

#### Ilustration-

(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. 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 hasis "
- 63. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, 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. The RoE allowed for the transmission asset under Regulation 30 of the 2019 Tariff Regulations is as under:

(₹ in lakh)

					(X III Idikii)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	88.70	88.70	88.70	88.70	88.70
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Equity	88.70	88.70	88.70	88.70	88.70
Average Equity	88.70	88.70	88.70	88.70	88.70
Return on Equity (Base Rate) (%)	15.500	. 15.500	15,500	15.500	15.500
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pretax)	16.66	16.66	16.66	16.66	16.66

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

- 64. Regulations 35(3)(a) and (4) of the 2019 Tariff Regulations provide as under:
  - "(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 ba					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per	km)		· · · · · ·		
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (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-

Order in Petition No. 332/TT/2019

Page 35 of 47

- 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."
- 65. The Petitioner has claimed O&M Expenses for the following transmission elements during the 2019-24 period:
  - I. <u>Transmission Line</u>
    - (1) LILO of Siliguri Gangtok at MELLI 2.5 kms.
  - II. 132 kV AIS Sub-stations:
    - (1) Gangtok Bay 1 Bay





# (2) 132 kV Sub-station - 1 Bay

# III. Communication System:

- (1) PLCC
- 66. The O&M Expenses claimed by the Petitioner for the transmission asset are as follows:

**HV and DC Lines** (₹ in lakh) 2019-20 2020-21 2021-22 2022-23 2023-24 **Particulars** O&M for HV and DC Lines (as per norms) i. LILO of Siliguri Gangtok at 0.98 1.01 1.05 1.08 0.94 MELLI - 2.5 Kms. 1.01 1.05 **Total O&M Expenses** 0.94 0.98 1.08

Su	b-Station Bays					(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	O&M for Sub-station bays (as per norms)					
	132 kV AIS	32.16	33.28	34.46	35.66	36.92
	Total O&M Expenses	32.16	33.28	34.46	35.66	36.92

PL	CC					(₹ in lakh)
Γ	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	O&M for PLCC (as per norms)					
	PLCC	0.68	0.68	0.68	0.68	0.68
	Total O&M Expenses	0.68	0.68	0.68	0.68	0.68

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Total O&M Expenses Claimed	33.78	34.94	36.15	37.39	38.68

- 67. BSPHCL has submitted that O&M Expenses can be considered only in accordance with Regulation 35(3)(a) of the 2019 tariff Regulations.
- 68. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the 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. The relevant portions of the order dated 24.1.2021 in Petition No.126/TT/2020 are extracted hereunder.

"103. Thus, although PLCC equipment is a communication system, it has been considered as a part of sub-station, as it is used both for protection and communication. Therefore, we are of the considered view that rightly, it was not considered for separate O&M Expenses while framing norms of O&M for 2019-24 tariff period. While specifying norms for bays and transformers, O&M Expenses for PLCC have been included within norms for O&M Expenses for sub-station. Norms of O&M Expenses @2% of the capital cost in terms of Regulation 35(4) of the 2019 Tariff Regulations have been specified for communication system such as PMU, RMU, OPGW etc. and not for PLCC equipment."

"105. In our view, granting of O&M Expenses for PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations under the communication system head would tantamount to granting O&M Expenses twice for PLCC equipment as PLCC equipment has already been considered as part of the sub-station. Therefore, the Petitioner's prayer for grant of O&M Expenses for the PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations is rejected.

106. The principle adopted in this petition that PLCC is part of sub-station and accordingly no separate O&M Expenses is admissible for PLCC equipment in the 2019-24 tariff period under Regulation 35(4) of the 2019 Tariff Regulations shall be applicable in case of all petitions where similar claim is made by the Petitioner. As already mentioned, the Commission, however, on the basis of the claim made by the Petitioner has inadvertently allowed O&M Expenses for PLCC equipment @2% of its original project cost, which is applicable for other "communication system", for 2019-24 period in 31 petitions given in Annexure-3 of this order. Therefore, the decision in this order shall also be applicable to all the petitions given in Annexure-3. Therefore, PGCIL is directed to bring this decision to the notice of all the stakeholders in the 31 petitions given in Annexure-3 and also make revised claim of O&M Expenses for PLCC as part of the sub-station at the time of truing up of the tariff allowed for 2019-24 period in respective petitions."

69. Accordingly, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed.



70. The O&M Expenses approved for the transmission asset for the 2019-24 tariff period is as under:

**AC and HVDC Lines** 

(₹ in lakh)

and my DO Lines					( Tit laking
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norm (₹ lakh/km)					7.41
D/C Single Conductor	0.377	0.391	0.404	0.419	0.433
Line Length in km.					
LILO of Siliguri Gangtok at MELLI - 2.5 Kms.	2.50	2.50	2.50	2.50	2.50
Total OOM Evnence	0.94	0.98	1.01	1.05	1.08
Total O&M Expenses	0.94	0.90	1.01	1.05	1.00

**Sub-station Bays** 

(₹ in lakh)

ub-station bays					(Kiniakn)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norm (₹ lakh/bay)					
132 kV AIS	16.08	16.64	17.23	17.83	18.46
Number of bays					
132 kV AIS	2	2	2	2	2
O&M Expense for 132 kV AIS	32.16	33.28	34.46	35.66	36.92
Total O&M Expenses	32.16	33.28	34.46	35.66	36.92

(₹ in lakh)

					( THE LOUGH)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Total O&M Expenses	33.10	34.26	35.47	36.71	38.00
Allowed	33.10	34.20	35.47	30.71	36.00

# Interest on Working Capital (IWC)

71. Regulations 34(1)(c), 34(3), 34(4) and 3(7) of the 2019 Tariff Regulations provide 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

A

Order in Petition No. 332/TT/2019

Page 39 of 47

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 the 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%.
- 73. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest 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, Rate of Interest 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 the interest allowed thereon is as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M Expenses for 1 Month)	<b>2.76</b>	2.85	2.96	3.06	3.17
Maintenance Spares (15% of O&M)	4.97	5.14	5.32	5.51	5.70
Receivables (Equivalent to 45 days of annual transmission charges)	7.40	7.49	7.58	7.67	7.75
Total Working Capital	15.13	15.48	15.85	16.23	16.61
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	1.82	1.74	1.78	1.83	1.87



Page 40 of 47

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

74. The annual fixed charges for the transmission asset for the 2019-24 tariff period are summarized below:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	6.21	6.21	6.21	6.21	6.21
Interest on Loan	2.41	1.87	1.33	0.79	0.26
Return on Equity	16.66	16.66	16.66	16.66	16.66
Interest on Working Capital	1.82	1.74	1.78	1.82	1.87
O & M Expenses	33.10	34.26	35.47	36.71	38.00
Total	60.21	60.74	61.45	62.20	63.00

### Filing Fee and Publication Expenses

- 75. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses.
- 76. BSPHCL submitted that filing fee is at the discretion of the Commission and need not necessarily be allowed.
- 77. In response, the Petitioner has submitted that the Commission in its order dated 28.3.2016 in Petition No. 137/TT/2015 for determination of tariff for 2014-19 period allowed the recovery of petition filing fee and publication of notices from the beneficiaries on pro rata basis and the Petitioner is claiming the same as per Regulation 70(1) of the 2019 Tariff Regulations.
- 78. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.





## Licence Fee & RLDC Fees and Charges

79. The Petitioner has requested to allow it to bill and recover license fee and RLDC fees and charges, separately from the Respondents. The Petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Regulations 70(3) and (4) of the 2019 Tariff Regulations.

### **Goods and Services Tax**

- 80. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if GST on transmission is withdrawn from negative list in future.
- 81. BSPHCL submitted that in terms of Regulation 56 of the 2019 Tariff Regulations, statutory charges can be recovered only by a generating company and not a transmission licensee.
- 82. The Petitioner in its response has submitted that under CGST Act, 2017 implemented w.e.f. 1.7.2017, the Govt. of India has exempted the charges of transmission of electricity vide notification no. 12/2017 Central Tax (Rate) dated 28.6.2017 at serial no. 25 under the heading 9969 "Transmission or distribution of electricity by an electric transmission or distribution utility" by giving applicable GST rate as NIL. Hence, the transmission charges as indicated in the instant petition are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future on 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 Govt./ Statutory authorities, may also be allowed to be recovered from the beneficiaries.



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

### Security Expenses

- 84. The Petitioner has submitted that security expenses for 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 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 based on 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 a yearly basis.
- 85. 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 the Petition No. 260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period based on 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

86. 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

- The billing, collection and disbursement of the transmission charges approved 87. shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.
- 88. To summarise, the revised Annual Fixed Charges allowed for the transmission asset for the 2004-09 tariff period are as under:

Particulars	2005-06 (Pro-rata for 6 months)	2006-07	2007-08	(₹IN IAKN 2008-09
Annual Fixed Charges	48.92	101.61	105.44	111.43

89. The revised Annual Fixed Charges allowed for the transmission asset for the 2009-14 tariff period are as under:

					(₹in lakh)
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Annual Fixed Charges	103.98	106.53	108.64	110.97	113.69

The trued-up Annual Fixed Charges allowed for the transmission asset for the 90. 2014-19 tariff period are as under:





(₹in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	107.32	108.29	109.23	110.29	100.41

91. The Annual Fixed Charges allowed for the transmission asset for the 2019-24 tariff period in this order are as under:

(₹in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	60.21	60.74	61.45	62.20	63.00

- 92. Annexures attached hereto form part of the order.
- 93. This order disposes of Petition No. 332/TT/2019.

sd/-	sd/-	sd/-	sd/-	sd/-
(P. S. Mhaske)	(Pravas Kumar Singh)	(Arun Goyal)	(l. S. Jha)	(P. K. Pujari)
Member (Ex-officio)	Member (Law)	Member	Member	Chairperson



Petition No.:	332-TT-2019
Period	2014-19 True-up

## Annexure - 1

2014-19	Admitted Capital Cost as on	Admitted Capital Cost as on	Rate of Depreciation	Annual Depreciation as per Regulations							
Capital Expenditure as on 1.4.2014	1.4.2014 (₹ in lakh)	31.3.2019 (₹ in lakh)	as per Regulations	2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)			
Transmission Line	111.67	111.67	5.28%	5.90	5.90	5.90	5.90				
Sub Station	179.56	179.56	5.28%	9.48	9.48	9.48	9.48				
PLCC	34.08	34.08	6.33%	2.16	2.16	2.16	2.16				
TOTAL	325.31	325.31		17.53	17.53	17.53	17.53	6.21			
		Average Gross Bl	ock (₹ in lakh)	325.31	325.31	325.31	325.31	325.31			
		Weighted Avera Depreciati		5.39%	5.39%	5.39%	5.39%	Spread			





Order in Petition No. 332/TT/2019

Petition No.:	332-TT-2019
Period	2019-24 Tariff

#### Annexure - 2

2019-24	Combined Admitted Capital	Admitted Capital Cost as on	Rate of Depreciation	Annual Depreciation as per Regulations						
Capital Expenditure as on 1.4.2019	Cost as on 1.4.2019. (₹ in lakh)	31.3.2024 (₹ in lakh)	as per Regulations	2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)		
Transmission Line	111.67	111.67	5.28%							
Sub Station	179.56	179.56	5.28%							
PLCC	34.08	34.08	6.33%							
TOTAL	325.31	325.31		6.21	6.21	6.21	6.21	6.21		
N		Average Gross BI	ock (₹ in lakh)	325.31	325.31	325.31	325.31	325.31		
		Weighted Aver Depreciation		Spread	Spread	Spread	Spread	Spread		







# **Summary of Tariff**

Form No. - 1

Name of the	Transmission Licensee:	Power Grid Corporation	on of India Limited					
Project Integration of Sikkim Transmission System with ER at Gangtok								
Element Description	If II ( ) of Silidiri - (-2ndfok section of 132 kV Randif-Silidiri line at Meli							
Region	Eastern Region DOCO Date Oct 1, 2005							

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Year Days	366.00	365.00	365.00	365.00	366.00
Tariff Days	366.00	365.00	365.00	365.00	366.00
Depreciation-Form No. 10A	6.21	6.21	6.21	6.21	6.21
Interest on Loan-Form No. 9E	2.41	1.87	1.33	0.79	0.26
Return on Equity-Form No. 8	16.66	16.66	16.66	16.66	16.66
Int. on Working capital-Form No.11	1.82	1.74	1.66	1.70	2.00
Op. and maintenance-Form No.2	33.10	34.26	35.47	36.71	38.00
Total AFC	60.20	60.74	61.33	62.07	63.13



# 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	ct Integration of Sikkim Transmission System with ER at Gangtok								
Element Description	LILO of Siliguri - Gangtok section of 132 kV Rangit-Siliguri line at Me	ILO of Siliguri - Gangtok section of 132 kV Rangit-Siliguri line at Meli							
Region	Eastern Region DOCO Date Oct 1, 2005								

#### 1. Transmission Lines

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/	S/C or D/C	No of Sub- Conductors		Line Bays	Line Reactor (Including Switchable	Line Length Km	Date of Commercial operation	pre	ed in the sent ition If No, Petition
	HVDC			KV		Reactor)		operation		No.
LILO OF SILIGURI GANGTOK AT MELLI	AC	DC	1	132 KV	0.000	0.000	2.500	Oct 1, 2005	Y	

## Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24	
DOUBLE CIRCUIT (SINGLE CONDUCTOR)						
Normative Rate of O&M as per Regulation	0.377	0.391	0.404	0.419	0.433	
No of Units - ( Length in KM )	2.50	2.50	2.50	2.50	2.50	
O&M Claimed	0.94	0.98	1.01	1.05	1.08	

## 2. Sub Station

	Type of	Voltage	No. of Transfor ms/	for		MVA/MVAR Capacity				Date of	Covered in the present petition			
Name of Sub-station	Substation	Level KV	Reactor/ SVC etc. (with capacity)	765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV	Comm. operation	Ye s/	If No, Petitio n No.
Melli:132KV LINE BAY FOR GANGTOK	A	132 KV					1.000					Oct 1, 2005	Y	
Melli:132KV LINE BAY FOR SILIGURI		132 KV					1.000					Oct 1, 2005	Y	

# Summary:

O&M Expenses For Substations Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
132KV SUB-STATION AND BELOW					
Normative Rate of O&M as per Regulation	16.08	16.64	17.23	17.83	18.46
No. of Units	2.00	2.00	2.00	2.00	2.00
O&M Claimed	32.16	33.28	34.46	35.66	36.92



Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M					
Transmission Line	0.94	0.98	1.01	1.05	1.08
Substation	32.16	33.28	34.46	35.66	36.92
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	33.10	34.26	35.47	36.71	38.00
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition)	-				
*Security Expenses	0.00	0.00	0.00	0.00	0.00
*Actual Capital Spare consumed	0.00	0.00	0.00	0.00	0.00
*Insurance Premium Paid	0.00	0.00	0.00	0.00	0.00
Total O&M	33.10	34.26	35.47	36.71	38.00



# Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee Power Grid Corporation of India Limited					
Project Integration of Sikkim Transmission System with ER at Gangtok					
Element Description  LILO of Siliguri - Gangtok section of 132 kV Rangit-Siliguri line at Meli					
Region	Eastern Region		DOCO Date	Oct 1, 2005	

(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)	i e		2411			
765 kV	0.00	0.491	0.508	0.526	0.545	0.564
400 kV	0.00	0.358	0.371	0.384	0.398	0.411
220 kV	0.00	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.00	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (Rs Lakh per km)						
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.806	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub- conductors)	0.691	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.461	0.503	0.521	0.539	0.558	0.578

Page 1 of 2

79

0054001 : Truing Up: LiLO of Siliguri - Gangtok section of 132 kV Rangies puri line

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	2,942.00

V



#### Form No. - 8

## **Calculation of ROE**

Name of the 1	Fransmission Licensee	Power Grid Corporation of India Limited			
Project Integration of Sikkim Transmission System with ER at Gangtok					
Element Description	II II ( ) of Siliguin - Ganglek section of 132 kV Rangit-Siliguin line at Mell				
Region	Eastern Region	DOCO Date Oct 1, 2005			

(Amount in Rs. Lakh)

5.00 5.00 3.71	366.00 366.00 88.71
3.71	
-	88.71
1.00	
	0.00
00.0	0.00
3.71	88.71
0.00	0.00
00.0	0.00
00.0	0.00
3.71	88.71
3.71	88.71
782	18.782
00.0	0.00
i.50	15.50
472	17.472
782	18.782
3.66	16.66
5.66	16.66
8 0 0 0 8 8 6 6	0.00 8.71 0.00 0.00 0.00 8.71 8.71 .782 0.00 5.50 .472 .782 6.66 6.66

## Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee Power Grid Corporation of India Limited					
Project Integration of Sikkim Transmission System with ER at Gangtok					
Element Description  LILO of Siliguri - Gangtok section of 132 kV Rangit-Siliguri line at Meli					
Region	Eastern Region	DOCO Date Oct 1, 2005			

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
BOND XV -DOCO					
Gross Loan- Opening	80.00	80.00	80.00	80.00	80.00
Cumulative repayments of Loans upto previous year	80.00	80.00	80.00	80.00	80.00
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	6.68	6.68	6.68	6.68	6.68
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XVI -DOCO					
Gross Loan- Opening	125.00	125.00	125.00	125.00	125.00
Cumulative repayments of Loans upto previous year	125.00	125.00	125.00	125.00	125.00
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

Page 1 of 3

Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	7.10	7.10	7.10	7.10	7.10
Interest on loan	0.00	0.00	0.00	0.00	0.00

13.68	13.68	13.68	13.68	13.68
10.26	11.40	12.54	13.68	13.68
3.42	2.28	1.14	0.00	0.00
0.00	0.00	0.00	0.00	0.00
1.14	1.14	1.14	0.00	0.00
2.28	1.14	0.00	0.00	0.00
2.85	1.71	0.57	0.00	0.00
8.68	8.68	8.68	8.68	8.68
0.2474	0.1484	0.0495	0.00	0.00
	10.26 3.42 0.00 1.14 2.28 2.85 8.68	10.26 11.40 3.42 2.28 0.00 0.00 1.14 1.14 2.28 1.14 2.85 1.71 8.68 8.68	10.26       11.40       12.54         3.42       2.28       1.14         0.00       0.00       0.00         1.14       1.14       1.14         2.28       1.14       0.00         2.85       1.71       0.57         8.68       8.68       8.68	10.26       11.40       12.54       13.68         3.42       2.28       1.14       0.00         0.00       0.00       0.00       0.00         1.14       1.14       1.14       0.00         2.28       1.14       0.00       0.00         2.85       1.71       0.57       0.00         8.68       8.68       8.68       8.68

# Summary

Gross Loan- Opening	218.68	218.68	218.68	218.68	218.68
Cumulative repayments of Loans upto previous year	215.26	216.40	217.54	218.68	218.68
Net loan-Opening	3.42	2.28	1.14	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	1.14	1.14	1.14	0.00	0.00
Net Loan-Closing	2.28	1.14	0.00	0.00	0.00
Average Net Loan	2.85	1.71	0.57	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.6807	8.6784	8.6842	8.6842	8.6842
Interest on loan	0.2474	0.1484	0.0495	0.00	0.00

83

Page 3 of 3

## Calculation of interest on Normative loan

Form No. - 9E

Name of the T	ransmission Licensee	Power Grid Corporation of India Limited		
Project Integration of Sikkim Transmission System with ER at Gangtok				
Element Description  LILO of Siliguri - Gangtok section of 132 kV Rangit-Siliguri line at Meli				
Region	Eastern Region		Oct 1, 2005	

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the Year	366.00	365.00	365.00	365.00	366.00
No. of days for which Tariff claimed	366.00	365.00	365.00	365.00	366.00
Gross normative loan-Opening	236.61	236.61	236.61	236.61	236.61
Cumulative repayments of Normative loan upto previous year	205.78	211.99	218.20	224.41	230.62
Net normative loan-Opening	30.83	24.62	18.41	12.20	5.99
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	6.21	6.21	6.21	6.21	5.99
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	24.62	18.41	12.20	5.99	0.00
Average normative loan	27.73	21.52	15.31	9.10	3.00
Weighted Average Rate of interest on actual loan	8.6807	8.6784	8.6842	8.6842	8.6842
Interest on normative loan	2.41	1.87	1.33	0.79	0.26
Pro rata interest on normative loan	2.41	1.87	1.33	0.79	0.26



# Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the 1	Fransmission Licensee	Power Grid Corpora	tion of India Limited			
Project Integration of Sikkim Transmission System with ER at Gangtok						
Element Description	ILLEO At Siliduri - Gandtok section at 132 kV Randit-Siliduri line at Mell					
Region	Eastern Region DOCO Date Oct 1, 2005					

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2024
2019-20						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	111.67	0.00	111.67	111.67	5.28	2.13
Sub Station	179.56	0.00	179.56	179.56	5.28	3.43
Comm. Sys. excluding Fiber Optic	34.08	0.00	34.08	34.08	6.33	0.65
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	325.31	0.00	325.31	325.31	0.00	6.21
Weighted Average Rate of Depreciation(%)					1.908948	

2020-21						
Land(Freehold)	0.00	0.00	0.00	0.00	TEO.00 D CO.	0.00

Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	111.67	0.00	111.67	111.67	5.28	2.13
Sub Station	179.56	0.00	179.56	179.56	5.28	3.43
Comm. Sys. excluding Fiber Optic	34.08	0.00	34.08	34.08	6.33	0.65
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	325.31	0.00	325.31	325.31	0.00	6.21
Weighted Average Rate of Depreciation(%)					1.908948	

2021-22						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	111.67	0.00	111.67	111.67	5.28	2.13
Sub Station	179.56	0.00	179.56	179.56	5.28	3.43
Comm. Sys. excluding Fiber Optic	34.08	0.00	34.08	34.08	6.33	0.65
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	325.31	0.00	325.31	325.31	0.00	6.21
Weighted Average Rate of Depreciation(%)					1.908948	ER GRID

Page 2 of 4

2022-23						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	111.67	0.00	111.67	111.67	5.28	2.13
Sub Station	179.56	0.00	179.56	179.56	5.28	3.43
Comm. Sys. excluding Fiber Optic	34.08	0.00	34.08	34.08	6.33	0.65
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	325.31	0.00	325.31	325.31	0.00	6.21
Weighted Average Rate of Depreciation(%)					1.908948	

2023-24						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	111.67	0.00	111.67	111.67	5.28	2.13
Sub Station	179.56	0.00	179.56	179.56	5.28	3.43
Comm. Sys. excluding Fiber Optic	34.08	0.00	34.08	34.08	6.33	0.65
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	325.31	0.00	325.31	325.31	0.00	6.21

0054001 : Truing Up: LILO of Siliguri - Gangtok section of 132 kV Rang Siliguri

Weighted Average Rate of			1 908948	
Depreciation(%)			1.000010	



Page 4 of 4

## **Statement of Depreciation**

Name of the Tr	ansmission Licensee	Power Grid Corporati	on of India Limited		
Project Integration of Sikkim Transmission System with ER at Gangtok					
Element Description	ILU O of Siliduri - Gandrok section of 132 kV Randif-Siliduri line at Meli				
Region	Eastern Region		DOCO Date	Oct 1, 2005	

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	366.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
Life at the beginning of the year					,
1.1 Weighted Average useful life of the Asset/ Project	27.00	27.00	27.00	27.00	27.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	13.00	14.00	15.00	16.00	17.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	14.00	13.00	12.00	11.00	10.00
Capital Base					
1.4 Opening capital cost	325.31	325.31	325.31	325.31	325.31
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	325.31	325.31	325.31	325.31	325.31
1.8 Average capital cost	325.31	325.31	325.31	325.31	325.31
1.9 Freehold land included in 1.8	0.00	0.00	0.00	0.00	0.00
1.10 Asset having NIL salvage value included in 1.8	0.00	0.00	0.00	0.00	0.00
1.11 Asset having 10% salvage value included in 1.8	325.31	325.31	325.31	325.31	325.31
1.12 Depreciable Value(1.10+90% of 1.11)	292.77	292.77	292.77	292.77	292.77
Depreciation for the period and Cum.  Depreciation					
1.13 Weighted Average Rate of depreciation	1.908948	1.908948	1.908948	1.908948	1.908948

Page 1 of 2

90

0054001 : Truing Up: LILO of Siliguri - Gangtok section of 132 kV Rangit Siliguri line:

1.14 Depreciation(for the period)	6.21	6.21	6.21	6.21	6.21
1.15 Depreciation(Annualised)	6.21	6.21	6.21	6.21	6.21
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	205.79	212.00	218.21	224.42	230.63
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	212.00	218.21	224.42	230.63	236.84



# Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee		Power Grid Corporation of India Limited					
Project Integration of Sikkim Transmission System with ER at Gangtok							
Element Description	ILILO of Siliguri - Gangtok section of 132 kV Rangit-Siliguri line at Meli						
Region	Region Eastern Region DOCO Date Oct 1, 2005						

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	366.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
O&M Expenses-one month	2.76	2.86	2.96	3.06	3.17
Maintenance spares 15% of O&M Expenses	4.97	5.14	5.32	5.51	5.70
Receivables equivalent to 45 days of AFC	7.40	7.49	7.56	7.65	7.76
Total Working capital	15.13	15.49	15.84	16.22	16.63
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	1.82	1.74	1.66	1.70	2.00
Pro rata interest on working capital	1.82	1.74	1.66	1.70	2.00



#### Form No. - 1

## **Summary of Tariff**

Name of the Transmission Licensee: Power Grid Corporation of India Limited								
Project Integration of Sikkim Transmission System with ER at Gangtok								
Element Description	I I I O of Siliduri - Landrok section of 132 kV Randif-Siliduri line at Meli							
Region	Eastern Region DOCO Date Oct 1, 2005							

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Year Days	365.00	365.00	365.00	366.00	365.00
Tariff Days	365.00	365.00	365.00	366.00	365.00
Depreciation-Form No. 10A	6.21	6.22	6.21	6.22	6.21
Interest on Loan-Form No. 9E	0.00	0.00	0.00	0.00	0.00
Return on Equity-Form No. 8	16.66	16.66	16.66	16.66	16.66
Int. on Working capital-Form No.11	1.74	1.81	1.89	1.97	2.06
Op. and maintenance-Form No.2	32.48	34.19	35.98	37.88	39.83
Total AFC	57.09	58.88	60.74	62.73	64.76



# 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	ect Integration of Sikkim Transmission System with ER at Gangtok							
Element Description	LILO of Siliguri - Gangtok section.of 132 kV Rangit-Siliguri line at Meli							
Region	Eastern Region	DOCO Date	Oct 1, 2005					

#### 1. Transmission Lines

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/	C/ D/C	No of Sub- Conductors	The supplier of the supplier o	The same of the sa		Line Reactor	Line Length	Date of Commercial	pre: peti	ed in the sent ition
Name of Line	HVDC					Switchable Reactor)	Km	operation		Petition No.	
LILO OF SILIGURI GANGTOK AT MELLI	AC	DC	1	132 KV	0.000	0.000	2.500	Oct 1, 2005	Y		

## 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 (SINGLE CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.369	0.388	0.409	0.43	0.453
No. of Units - ( Length in KM )	2.50	2.50	2.50	2.50	2.50
O&M Claimed	0.92	0.97	1.02	1.08	1.13

#### 2. Sub Station

Name of Sub-station	Type of	Voltage	No. of Transfor ms/	No. of Bays		5	MVA/MVAR Capacity			Date of	Covered in the present petition			
	Substation	Level KV	The second secon	765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV	Comm. operation	s/	If No, Petitio n No.
Melli:132KV LINE BAY FOR GANGTOK		132 KV					1.000					Oct 1, 2005	Υ	
Melli:132KV LINE BAY FOR SILIGURI		132 KV					1.000					Oct 1, 2005	Y	

# Summary:

O&M Expenses For Substations Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
132KV SUB-STATION AND BELOW					
Normative Rate of O&M as per Regulation	15.78	16.61	17.48	18.40	19.35
No. of Units	2.00	2.00	2.00	2.00	2.00
O&M Claimed	31.56	33.22	34.96	36.80	38.70



Particular	2024-25	2025-26	2026-27	2027-28	2028-29
A) Normative O&M		_			
Transmission Line	0.92	0.97	1.02	1.08	1.13
Substation	31.56	33.22	34.96	36.80	38.70
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	32.48	34.19	35.98	37.88	39.83
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition)					
*Security Expenses	0.00	0.00	0.00	0.00	0.00
*Actual Capital Spare consumed	0.00	0.00	0.00	0.00	0.00
*Insurance Premium Paid	0.00	0.00	0.00	0.00	0.00
Total O&M	32.48	34.19	35.98	37.88	39.83



Name of the	Transmission Licensee	Power Grid Corporation	on of India Limite	d				
Project Integration of Sikkim Transmission System with ER at Gangtok								
Element Description	II II I I OT SIIIGUT - (-2000TOK SECTION OT 137 KV RADOIT-SIIIGUTI IIDE AT MEII							
Region	Eastern Region		DOCO Date	Oct 1, 2005				

(Amount in Rs. Lakh)

Particulars	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Base Rate of Return of Equity (in %)						
Tax Rate (in %)	17.472	17.472	17.472	17.472	17.472	17.472
Effective tax rate (in %)		•				
Grossed up Rate for ROE of 15.5% (in %)	18.782	18.782	18.782	18.782	18.782	18.782
Grossed up Rate for ROE of 15.0% (in %)	18.176	18.176	18.176	18.176	18.176	18.176
Target availability - AC System (in %)	98.00	98.00	98.00	98.00	98.00	98.00
Target availability - HVDC System (in %)	96.00	96.00	96.00	96.00	96.00	96.00
Norms for sub-station Bays (Rs Lakh per bay)						
765 kV	51.68	41.34	43.51	45.79	48.20	50.73
400 kV	36.91	29.53	31.08	32.71	34.43	36.23
220 kV	25.84	20.67	21.75	22.90	24.10	25.36
132 kV and below	18.46	15.78	16.61	17.48	18.40	19.35
Norms for Transformers (Rs Lakh per MVA)					•	
765 kV	0.564	0.262	0.276	0.29	0.305	0.322
400 kV	0.411	0.262	0.276	0.29	0.305	0.322
220 kV	0.282	0.262	0.276	0.29	0.305	0.322
132 kV and below	0.282	0.262	0.276	0.29	0.305	0.322
Norms for Reactor (Rs Lakh per MVAR)						
765 kV	0.00	0.262	0.276	0.29	0.305	0.322
400 kV	0.00	0.262	0.276	0.29	ER GR0.305	0.322

Page 1 of 2

97

0054001 : LILO of Siliguri - Gangtok section of 132 kV R spit-iliguri line at Meli

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	2.13	2.24



#### Form No. - 8 **Calculation of ROE**

Name of the	Transmission Licensee	Power Grid Corporation	on of India Limited		
Project Integration of Sikkim Transmission System with ER at Gangtok					
Element Description  LILO of Siliguri - Gangtok section of 132 kV Rangit-Siliguri line at Meli					
Region	Eastern Region		DOCO Date	Oct 1, 2005	

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the year	365.00	365.00	365.00	366.00	365.00
No. of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
Opening Normative Equity	88.71	88.71	88.71	88.71	88.71
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)	88.71	88.71	88.71	88.71	88.71
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	88.71	88.71	88.71	88.71	88.71
Average Normative Equity	88.71	88.71	88.71	88.71	88.71
Rate of return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Reduced rate of 1% decided by commission under Regulation 30(2) (if any)	0.00	0.00	0.00	0.00	0.00
Effective rate of ROE	15.50	15.50	15.50	15.50	15.50
MAT/Corporate Rate	17.472	17.472	17.472	17.472	17.472
Grossed up rate of ROE	18.782	18.782	18.782	18.782	18.782
Pro rata return on Equity	16.66	16.66	16.66	16.66	16.66
Return on Equity	16.66	16.66	16.66	16.66	16.66

(Petitioner)

Page 1 of 1

# Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee Power Grid Corporation of India Limited						
Project Integration of Sikkim Transmission System with ER at Gangtok						
Element Description	n LILO of Siliguri - Gangtok section of 132 kV Rangit-Siliguri line at Meli					
Region	Eastern Region		DOCO Date	Oct 1, 2005		

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
BOND XV -DOCO					
Gross Loan- Opening	80.00	80.00	80.00	80.00	80.00
Cumulative repayments of Loans upto previous year	80.00	80.00	80.00	80.00	80.00
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	6.68	6.68	6.68	6.68	6.68
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XVI -DOCO					
Gross Loan- Opening	125.00	125.00	125.00	125.00	125.00
Cumulative repayments of Loans upto previous year	125.00	125.00	125.00	125.00	125.00
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

Page 1 of 3

Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	7.10	7.10	7.10	7.10	7.10
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XXII -ADDCAP FOR 2006-2007					
Gross Loan- Opening	13.68	13.68	13.68	13.68	13.68
Cumulative repayments of Loans upto previous year	13.68	13.68	13.68	13.68	13.68
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	8.68	8.68	8.68	8.68	8.68
Interest on loan	0.00	0.00	0.00	0.00	0.00

# Summary

Cross Loop, Opening	218.68	218.68	218.68	218.68	218.68
Gross Loan- Opening	210.00	210.00	210.00	210.00	210.00
Cumulative repayments of Loans upto previous year	218.68	218.68	218.68	218.68	218.68
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	8.6842	8.6842	8.6842	8.6842	8.6842
Interest on loan	0.00	0.00	0.00	OR 0.00	0.00

101

#### Form No. - 9E

## Calculation of interest on Normative loan

Name of the 1	Transmission Licensee	Power Grid Corporation of In	idia Limited	I		
Project	lntegration of Sikkim Transmission System with ER at Gangtok					
Element Description	ILILO OF SUIGUE - Gangrok Section of 132 kV Rangit-Suigue line at Well					
Region	Eastern Region	DOCC	) Date	Oct 1, 2005		

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the Year	365.00	365.00	365.00	366.00	365.00
No. of days for which Tariff claimed	365.00	365.00	365.00	366.00	365.00
Gross normative loan-Opening	236.61	236.61	236.61	236.61	236.61
Cumulative repayments of Normative loan upto previous year	236.61	236.61	236.61	236.61	236.61
Net normative loan-Opening	0.00	0.00	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	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00
Average normative loan	0.00	0.00	0.00	0.00	0.00
Weighted Average Rate of interest on actual loan	8.6842	8.6842	8.6842	8.6842	8.6842
Interest on normative loan	0.00	0.00	0.00	0.00	0.00
Pro rata interest on normative loan	0.00	0.00	0.00	0.00	0.00



Page 1 of 1

# Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee Power Grid Corporation of India Limited			ed			
Project	Integration of Sikkim Transmission System with ER at Gangtok					
Element Description  LILO of Siliguri - Gangtok section of 132 kV Rangit-Siliguri line at Meli						
Region	Eastern Region	=	DOCO Date	Oct 1, 2005		

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2029
2024-25						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	111.67	0.00	111.67	111.67	5.28	2.13
Sub Station	179.56	0.00	179.56	179.56	5.28	3.43
Comm. Sys. excluding Fiber Optic	34.08	0.00	34.08	34.08	15.00	0.65
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	325.31	0.00	325.31	325.31	0.00	6.21
Weighted Average Rate of Depreciation(%)					1.908948	

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

Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	111.67	0.00	111.67	111.67	5.28	2.14
Sub Station	179.56	0.00	179.56	179.56	5.28	3.43
Comm. Sys. excluding Fiber Optic	34.08	0.00	34.08	34.08	15.00	0.65
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	325.31	0.00	325.31	325.31	0.00	6.22
Weighted Average Rate of Depreciation(%)					1.912022	

2026-27						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	111.67	0.00	111.67	111.67	5.28	2.13
Sub Station	179.56	0.00	179.56	179.56	5.28	3.43
Comm. Sys. excluding Fiber Optic	34.08	0.00	34.08	34.08	15.00	0.65
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	325.31	0.00	325.31	325.31	0.00	6.21
Weighted Average Rate of Depreciation(%)					1.908948	ATION

Page 2 of 4

2027-28						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	111.67	0.00	111.67	111.67	5.28	2.14
Sub Station	179.56	0.00	179.56	179.56	5.28	3.43
Comm. Sys. excluding Fiber Optic	34.08	0.00	34.08	34.08	15.00	0.65
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	325.31	0.00	325.31	325.31	0.00	6.22
Weighted Average Rate of Depreciation(%)					1.912022	

2028-29						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	111.67	0.00	111.67	111.67	5.28	2.13
Sub Station	179.56	0.00	179.56	179.56	5.28	3.43
Comm. Sys. excluding Fiber Optic	34.08	0.00	34.08	34.08	15.00	0.65
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	325.31	0.00	325.31	325.31	0.00	ATION OF 6.21

Page 3 of 4 0054001 : LILO of Siliguri - Gangtok section of 132 kV Rangit-Siliguri line at Vel

Weighted Average Rate of			1.908948	
Depreciation(%)			1.000040	

voll



## **Statement of Depreciation**

Name of the T	ransmission Licensee	Power Grid Corporati	on of India Limited		
Project Integration of Sikkim Transmission System with ER at Gangtok					
Element Description	II II CLOT SIUDUR - I-ANDTOK SECTION OF LSZ KV BANDII-SIUDUR IIDE ALIVIEII				
Region	Eastern Region		DOCO Date	Oct 1, 2005	

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
Life at the beginning of the year	•		•		1
1.1 Weighted Average useful life of the Asset/ Project	27.00	27.00	27.00	27.00	27.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	18.00	19.00	20.00	21.00	22.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	9.00	8.00	7.00	6.00	5.00
Capital Base					
1.4 Opening capital cost	325.31	325.31	325.31	325.31	325.31
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	325.31	325.31	325.31	325.31	325.31
1.8 Average capital cost	325.31	325.31	325.31	325.31	325.31
1.9 Freehold land included in 1.8	0.00	0.00	0.00	0.00	0.00
1.10 Asset having NIL salvage value included in 1.8	0.00	0.00	0.00	0.00	0.00
1.11 Asset having 10% salvage value included in 1.8	325.31	325.31	325.31	325.31	325.31
1.12 Depreciable Value(1.10+90% of 1.11)	292.77	292.77	292.77	292.77	292.77
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	1.908948	1.912022	1.908948	1.912022	1.908948
				1400N	

Page 1 of 2

1.14 Depreciation(for the period)	6.21	6.22	6.21	6.22	6.21
1.15 Depreciation(Annualised)	6.21	6.22	6.21	6.22	6.21
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	236.84	243.05	249.27	255.48	261.70
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	243.05	249.27	255.48	261.70	267.91



# Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee		Power Grid Corpora	tion of India Limited	d	
Project Integration of Sikkim Transmission System with ER at Gangtok					
Element Description	LILO of Siliguri - Gangtok section of 132 kV Rangit-Siliguri line at Meli				
Region	Eastern Region		DOCO Date	Oct 1, 2005	

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
O&M Expenses-one month	2.71	2.85	3.00	3.16	3.32
Maintenance spares 15% of O&M Expenses	4.87	5.13	5.40	5.68	5.97
Receivables equivalent to 45 days of AFC	7.04	7.26	7.49	7.71	7.98
Total Working capital	14.62	15.24	15.89	16.55	17.27
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	1.74	1.81	1.89	1.97	2.06
Pro rata interest on working capital	1.74	1.81	1.89	1.97	2.06



		Summary of issue involved in the	PART-III petition FORM- 15							
1. Nam	e of the Pe	etitioner	Powergrid Corporation of India Ltd							
2. Petit	ion Catego	ory	Transmission							
3. Tarif	f Period		2019-24 & 2024-29							
	e of the Pr		Assets underLILO of Siliguri-Gangtok section of 132 kV Rangit- Siliguri transmission line at Melli under "Integration of Sikkim Transmission System" in Eastern Region							
5. Inves	stment App	proval date	NA							
	D of the P		NA							
7. Actu	al COD of	the project	01.10.2005							
		scope is covered in the present petition.	Yes							
		overed in instant petition	01 nos							
10. No.	of Assets	having time over run	NA							
		ject Cost as per IA	Rs. 511.00 Lakh							
		REC? if so, provide the date	NA							
		nated Project Cost (if any)	NA							
14. Cor	mpletion co	ost for all the assets covered in the instant petition.	Rs. 325.31 Lakh							
15. No.	of Assets	covered in instant petition and having cost overrun.	NA							
16	Prayer in	brief								
17	Key deta	ils and any Specific issue involved								
18	Respondents									
	Name of Respondents									
	1	BSPHCL								
	2	JBVNL								
	3	WBSEDCL								
	4	DVC								
	5	Power Dept., Govt. of Sikkim								
	6	GRIDCO								
		+								
		+	-							



											PART-III				
		Sumr	nary of Capital	Cost & Annua	Fixed Cost (AF	C) Claimed	for ALL the	assets cove	red in the pres	sent petition.					
Name of the Petitioner				Powergrid Corporation of India Ltd											
Tariff P	eriod			2019-24											
Name of f	the Transmission	n Project		Assets underLILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System" in Eastern Region											
OD of th	ne Project (if entire	scope of project is	completed)	01.10.2005											
				*								Rupees in lakt			
4) Summ	ary of Capital Co	st as on COD a	and Additional (	Capital Expend	diture claimed fo	r all the as:	sets Cover	ed in the insta	ant petition.						
		COD	i) Apportioned Approved Cost		ii) Summary of Actual / Projected Capital Cost							Capital Cost as			
S. No.	Asset No.		As per IA	As per RCE	As on COD/ as on 31.03.2019	2019-20	2020-21	2021-22	2022-23	2023-24	Capital Cost as on 31.03.2024	on Cut-off Date			
		1	2	3	4	5	6	7	8	9	11= (5+6+7+8+9+10)	12			
1	Asset-I	01.10.2005	511.00	NA	325.31	0	0	0	0	0	325.31	5			
Total Capital Cost Claimed 511.00				0.00	325.31	0.00	0.00	0.00	0.00	0.00	325.31				
3) Summ	ary of Trued-Up	Annual Fixed C	Cost (AFC) clain	ned for all the	assets covered	in the insta	nt petition.								
S. No.	Asset No.	Asset Name and its location						2019-20	2020-21	2021-22	2022-23	2023-24			
1	Asset-I	Assets underLILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System" in Eastern Region							60.74	61.33	62.07	63.13			
			Total AFC for al	I the Assets				60.2	60.74	61.33	62.07	63.13			

w



											PART-III			
		Sumn	nary of Capital (	Cost & Annual	Fixed Cost (AF	C) Claimed	for ALL the	assets cove	red in the pres	ent petition.				
				Powergrid Corporation of India Ltd										
Tariff P	eriod			2024-29										
lame of t	he Transmission	n Project		Assets underLILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System" in Eastern Region										
COD of th	e Project (if entire	scope of project is	completed)	01,10,2005										
												Rupees in lak		
A) Summa	ary of Capital Co	st as on COD a	nd Additional C	apital Expend	diture claimed fo	r all the as:	sets Covere	ed in the insta	ant petition.					
	Asset No.	COD	·i) Apportioned Approved Cost		dii) Summary of Actual / Projected Capital Cost							Capital Cost as		
S. No.			As per IA	As per RCE	As on COD/ as on 31.03.2024	2024-25	2025-26	2026-27	2027-28	2028-29	Capital Cost considered as on 31.03.2029	on Cut-off Date		
		1	2	3	4	5	6	7	8	9	11= (5+6+7+8+9+10)	12		
1	Asset-I	01.10.2005	511.00	NA	325.31	0	О	0	0	0	325,31			
Total Capital Cost Claimed 511.00				0.00	325,31	0.00	0.00	0.00	0.00	0.00	325.31			
3) Summ	ary of Annual Fix	ced Cost (AFC)	claimed for all	the assets co	vered in the inst	ant petition								
S. No.	Asset No.		Asset Name and its location						2025-26	2026-27	2027-28	2028-29		
1	Asset-I	Assets underLILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri transmission line at Melli under "Integration of Sikkim Transmission System" in Eastern Region							58.88	60.74	62.73	64.76		
			Total AFC for al	the Assets				57.09	58.88	60.74	62.73	64.76		

we



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

