#### BEFORE

# THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No.	/TT/
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#### IN THE MATTER OF: -

Petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Combined Asset consisting of Asset I: Koldam Nalagarh 400 kV D/C (Quad) line along with bays at Nalagarh Sub-station and Asset II: 400 kV line bays at Ludhiana Sub-station covered under "Transmission System associated with Koldam Hydro-electric Project" in the Northern Region under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) 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).

--- RESPONDENT(S)

Uttar Pradesh Power Corporation Ltd.
Shakti Bhawan, 14, Ashok Marg
Lucknow - 226 001
Represented by Its Chairman
And others

FILED BY

POWER GRID CORPORATION OF INDIA LTD.

**GURGAON** 

REPRESENTED BY

DATED: 29.07.2024

Sr. General Manager (Regulatory Cell)

1

#### BEFORE

### THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

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Lucknow - 226 001

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**FILED BY** 

POWER GRID CORPORATION OF INDIA LTD.

**GURGAON** 

DATED: 29.07.2024

REPRESENTED BY

(V.C. Sekhar)

Sr. General Manager (Regulatory Cell)

#### **BEFORE**

### THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

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Registered office: B-9, Qutab Institutional Area,

--- PETITIONER

---- RESPONDENT(S)

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Uttar Pradesh Power Corporation Ltd.
Shakti Bhawan, 14, Ashok Marg
Lucknow - 226 001
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 the 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

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Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 and same may please be registered and taken on record by the Hon'ble Commission.

GURGAON FILED BY

DATED:- 29.07.2024

POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

(V.C. Sekhar)

Sr. General Manager (Regulatory Cell)

#### **BEFORE**

### THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

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IN THE MATTER OF: Petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Combined Asset consisting of Asset I: Koldam Nalagarh 400 kV D/C (Quad) line along with bays at Nalagarh Substation and Asset II: 400 kV line bays at Ludhiana Sub-station covered under "Transmission System associated with Koldam Hydro-electric Project" in the Northern Region under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

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Uttar Pradesh Power Corporation Ltd...

---- RESPONDENT(S)

Shakti Bhawan, 14, Ashok Marg

Lucknow - 226 001

Represented by Its Chairman

And others

#### **MEMO OF PARTIES**

Power Grid Corporation of India Ltd.

**VERSUS** 

--- PETITIONER

#### Northern Region

--- RESPONDENT

- 1. UTTAR PRADESH POWER CORPORATION LTD. SHAKTI BHAWAN, 14, ASHOK MARG LUCKNOW - 226 001 REPRESENTED BY ITS CHAIRMAN
- 2. AJMER VIDYUT VITRAN NIGAM LTD CORPORATE OFFICE, VIDYUT BHAWAN,



PANCHSHEEL NAGAR, MAKARWALI ROAD AJMER-305004 (RAJASTHAN) REPRESENTED BY ITS MANAGING DIRECTOR

- 3. JAIPUR VIDYUT VITRAN NIGAM LTD 132 KV, GSS RVPNL SUB- STATION BUILDING, CALIGIRI ROAD, MALVIYA NAGAR, JAIPUR-302017 (RAJASTHAN) REPRESENTED BY ITS MANAGING DIRECTOR
- 4. JODHPUR VIDYUT VITRAN NIGAM LTD NEW POWER HOUSE, INDUSTRIAL AREA , JODHPUR – 342 003(RAJASTHAN) REPRESENTED BY ITS MANAGING DIRECTOR
- 5. HIMACHAL PRADESH STATE ELECTRICITY BOARD LTD VIDYUT BHAWAN KUMAR HOUSE COMPLEX BUILDING II SHIMLA-171 004 REPRESENTED BY ITS CHAIRMAN
- 6. PUNJAB STATE POWER CORPORATION LIMITED THE MALL, PSEB HEAD OFFICE, PATIALA - 147 001 REPRESENTED BY ITS CHAIRMAN AND MANAGING DIRECTOR
- 7. HARYANA POWER PURCHASE CENTRE SHAKTI BHAWAN, SECTOR-6 PANCHKULA (HARYANA) 134 109 REPRESENTED BY ITS S.E. / C & R-1
- 8. JAMMU KASHMIR POWER CORPORATION LIMITED 220/66/33 KV GLADNI SS SLDC BULIDING NARWAL, JAMMU REPRESENTED BY ITS CHAIRMAN
- BSES YAMUNA POWER Ltd,
   B-BLOCK, SHAKTI KIRAN, BLDG.
   (NEAR KARKADOOMA COURT),
   KARKADOOMA 2ND FLOOR,
   NEW DELHI-110092
   REPRESENTED BY ITS CEO
- 10. BSES RAJDHANI POWER Ltd, BSES BHAWAN, NEHRU PLACE, NEW DELHI REPRESENTED BY ITS CEO



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- 11. TATA POWER DELHI DISTRIBUTION LTD.
  33 KV SUBSTATION, BUILDING
  HUDSON LANE, KINGSWAY CAMP
  NORTH DELHI 110009
  REPRESENTED BY ITS CEO
- 12. CHANDIGARH ELECTRICITY DEPTT.
  CHANDIGARH ADMINISTRATION
  SECTOR -9, CHANDIGARH.
  REPRESENTED BY ITS CHIEF ENGINEER
- 13. UTTARAKHAND POWER CORPORATION LTD.
  URJA BHAWAN
  KANWALI ROAD
  DEHRADUN.
  REPRESENTED BY ITS MANAGING DIRECTOR
- 14. NORTH CENTRAL RAILWAY
  ALLAHABAD.
  REPRESENTED BY CHIEF ELECTRICAL
  DISTRIBUTIONENGINEER
- 15. NEW DELHI MUNICIPAL COUNCIL PALIKA KENDRA, SANSAD MARG, NEW DELHI-110002 REPRESENTED BY CHAIRMAN

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

**GURGAON** 

DATED: 29.07.2024

Sr. General Manager (Regulatory Cell)

#### **BEFORE**

### THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

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

IN THE MATTER OF: Petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Combined Asset consisting of Asset I: Koldam Nalagarh 400 kV D/C (Quad) line along with bays at Nalagarh Substation and Asset II: 400 kV line bays at Ludhiana Sub-station covered under "Transmission System associated with Koldam Hydro-electric Project" in the Northern Region under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

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Uttar Pradesh Power Corporation Ltd.

Shakti Bhawan, 14, Ashok Marg

Represented by Its Chairman

And others

Lucknow - 226 001

--- RESPONDENT(S)

#### **MEMO OF APPEARANCE**

#### POWER GRID CORPORATION OF INDIA LTD.

-- PETITIONER

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

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I, V.C. Sekhar, 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 29th day of July 2024

**PETITIONER** 

POWER GRID CORPORATION OF INDIA LTD.

**GURGAON** 

DATED:- 29.07.2024

Sr. General Manager (Regulatory Cell)



#### **BEFORE**

## THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

IN THE MATTER OF: Petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Combined Asset consisting of Asset I: Koldam Nalagarh 400 kV D/C (Quad) line along with bays at Nalagarh Substation and Asset II: 400 kV line bays at Ludhiana Sub-station covered under "Transmission System associated with Koldam Hydro-electric Project" in the Northern Region under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

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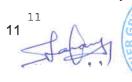
Uttar Pradesh Power Corporation Ltd.
Shakti Bhawan, 14, Ashok Marg
Lucknow - 226 001
Represented by Its Chairman
And others

---- RESPONDENT(S)

#### 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, own, operate and maintain an efficient, coordinated and economical inter-state 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 Commission"). Tariff for the transmission system established by POWERGRID is required to be determined by this Hon'ble Commission in accordance with the Tariff Regulations as notified by this Hon'ble 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 departments of the respective states which are engaged in distribution of electricity in Northern Region of India. The respondents are also 'Designated Inter State Transmission Customer' (hereinafter referred to as 'DICs') from Northern region in terms of the 2020 Sharing Regulations.

#### (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 below asset in Northern Region:

Asset No	Asset Name	DOCO	Remarks
Combined Asset	Asset I: Koldam Nalagarh 400 kV D/C (Quad) line along with bays at Nalagarh Sub-station and Asset II: 400 kV line bays at Ludhiana Sub-station.	01.04.2010 & 01.04.2011	Notional DOCO: 01.04.2011

#### (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 asset on capital cost comprising of expenditure incurred/Admitted upto 31.03.2019/DOCO and additional capital expenditure during 2019-24 & 2024-29 in accordance with provisions of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("Tariff Regulations, 2019") and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 ("Tariff Regulations, 2024").



4. The details of FR/RCE apportioned approved cost vis-a-vis claimed capital cost as on 31.03.2019 and additional capital expenditure during 2019-24 and 2024-29 tariff block are as under:

#### Rs in lakhs

Asset No.	Apportioned	Expenditure	Expenditure	Actual Cost
	Approved Cost	Up to DOCO	during 2019-24	as on
	as per FR	/31.03.2019	tariff block	31.03.2024
Asset-1	19933.00	18684.23	No add cap	18684.23

#### Rs in lakhs

Asset No.	Apportioned	Expenditure	Expenditure	Actual Cost
	Approved Cost	Up to	during 2024-29	as on
	as per FR	31.03.2024	tariff block	31.03.2029
Asset-1	19933.00	18684.23	No add cap	18684.23

**5.** Details of tariff claimed are as under:

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

#### Rs in Lakhs

Name of the asset	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
0 1: 1	AFC approved	2623.62	2534.12	2447.82	2362.10	1497.11
Combined Asset	Revised AFC based on truing up	2623.64	2534.11	2445.15	2359.51	1498.92

Tariff claimed for 2024-29 tariff block:

#### Rs in Lakhs

Name of the asset	2024-25	2025-26	2026-27	2027-28	2028-29
Combined Asset	1444.02	1449.25	1459.49	1470.31	1481.67

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



#### **B.** Detailed Petition:

#### MOST RESPECTFULLY SHOWETH:

#### Issue wise submission(s):

- 7. The Petitioner herein, Power Grid Corporation of India Ltd/ POWERGRID. is a Government Company within the meaning of the Companies Act, 1956. POWERGRID is a deemed transmission licensee under Section 14 of the Electricity Act 2003.
- 8. POWERGRID being transmission licensee is required to inter-alia build, own, operate and maintain an efficient, coordinated and economical inter-state transmission system (ISTS). The tariff for the said transmission systems shall be determined by the Hon'ble Commission in accordance with the provisions of 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	
Combin ed Asset	Asset I; Koldam Nalagarh 400 kV D/C (Quad) line along with bays at Nalagarh Sub-station and Asset II: 400 kV line bays at Ludhiana Sub-station.	01.04.2010 & 01.04.2011	Earlier covered under petition no. 24/TT/2020 now covered under instant petition	

#### 10. Cost details:

The capital cost of Rs. 18684.23 Lakhs for subject Asset has been admitted by Hon'ble commission vide order dated 11.02.2021 in petition no. 24/TT/2020. Copy of order is enclosed as **Encl-1**. In the current petition, no additional capital expenditure was incurred during the 2019-24 tariff block, and no additional capital expenditures are proposed during the 2024-29 tariff block.

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

The truing up exercise for the period 2019-2024 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.

#### Regulation 13 of Tariff Regulation, 2019:

#### 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 Regulations, 2019 dated 07.03.2019 in the truing up petition for 2019-24 tariff block.

#### Regulation 31 (3) of the tariff Regulation, 2019:

#### 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 have 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 to be trued up accordingly for the block period 2019-24 is summarized as under:-

Financial	Basis	Total Tax &	Assessed MAT	Effective	Grossed
Year	considered	Interest paid	Income	Tax	up ROE



		(Rs)	under Sec 115 JB (Rs)	percentage	(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.

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

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

Rs in Lakh

Project		2019-20	2020-21	2021-22	2022-23	2023-24
Asset-1	AFC approved	2623.62	2534.12	2447.82	2362.10	1497.11
	Revised AFC based on truing up	2623.64	2534.11	2445.15	2359.51	1498.92

Tariff filing forms along with the other relevant information and supporting documents 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 worked out for 2024-29 tariff block is summarized below:

Rs in Lakh

Project		2024-25	2025-26	2026-27	2027-28	2028-29
Asset-1	AFC	1444.02	1449.25	1459.49	1470.31	1481.67



Tariff filing forms along with the other relevant information and supporting documents are attached hereto as **Encl-3**.

- 14. The asset has completed 12 Yrs of life in 2022-23, and thus the remaining depreciable amount at end of 12 yrs have been spread over the balance useful life of the asset as per clause 33 (5) of the CERC Tariff Regulations, 2024. The details have been computed and are provided in Form- 10 A.
- 15. That, it is submitted that the petitioner is currently liable to pay income tax at MAT rate specified in Income-tax Act, 1961. Therefore, ROE has been calculated @ 18.782% after grossing up the ROE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given at regulation 31 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for 2024-29 period. That as per clause 31 (3) of the above regulation, the grossed up rate of ROE at the end of every financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the tariff period 2024-29 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on ROE after truing up shall be recovered or refunded to beneficiaries or the long-term customers, as the case may be on year to year basis. It is further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable /adjustable during the tariff period 2024-29 on year to year basis on receipt of Income Tax assessment order.
- 16. Under CGST Act, 2017 implemented w.e.f. 01.07.2017, the Govt. of India has exempted the charges of transmission of electricity vide notification no. 12/2017 Central Tax (Rate) dated 28.06.2017 at serial no. 25 under the heading 9969 "Transmission or distribution of electricity by an electric transmission or distribution utility" by giving applicable GST rate as NIL. Hence, the Transmission Charges as indicated at para 12 and para-13 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 calculations 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 calculations 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 will be submitted shortly with a Truing-up petition and the details of the same will be submitted through an affidavit once submitted. These documents/details will also be made available on our website www.powergrid.in.

- **18.** The transmission charges at para-12 & 13 above is inclusive of O&M expenses derived for the subject asset based on the norms for O&M expenditure for Transmission System as specified under regulation 36 (3) (a) of the Tariff Regulations for block 2024-29.
- 19. That as per Regulation 36(3)(d) of CERC Tariff Regulations, 2024, the Security Expenses, Insurance and Capital Spares more than Rs. 10 Lakh for transmission system shall be allowed separately after prudence check.

Security Expenses:

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

#### Insurance:

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

#### **Capital Spare:**

With regard to Capital Spares, the Petitioner has filed a separate Petition bearing No 45/MP/2024 for claiming the capital spares under Tariff Regulation, 2019 for 2019-24 period. 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 for 2024-29 period as per actual through a separate petition.

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

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

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

21. The application 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) and Regulation 94(4) 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, 2023 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 or any other kind of imposition (s) and/ or other surcharges etc. whatsoever imposed / charged by any Government (Central/State) and / or any other local bodies/authorities/regulatory authorities in relation to transmission of electricity, environmental protection, and/or in respect of any of its installation associated with the Transmission System and the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged, billed separately by the petitioner on the respondents.

#### 23. Sharing of Transmission Charges

Tariff for Transmission of Electricity (Annual Fixed Cost) for 2019-24 as per para 12 above shall be recovered on monthly basis in accordance with Regulation 57 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and shall be shared by the beneficiaries and long-term transmission customers in terms of Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 and/or Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020, as amended from to time for the applicable periods.

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

24. In the circumstances mentioned above, it will be just and proper that the transmission tariff for the asset covered under this petition be allowed to be charged from the beneficiaries on the basis set out above. The Petitioner submits that Encl.-1 to Encl.-3 may please be treated as integral part of this petition.

#### A. PRAYER

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

- a) Approve the trued-up Transmission Tariff for 2019-24 block and transmission tariff for 2024-29 block for the asset 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 Regulations, 2019 and Tariff Regulations, 2024 as per para 12 and 13 above for respective block.
- c) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 94
   (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff)
   Regulations, 2024, and other expenditure ( if any) in relation to the filing of petition.
- d) Allow the petitioner to bill and recover RLDC fees & charges and Licensee fee, 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** 

POWER GRID CORPORATION OF INDIA LTD.

DATED: - 29.07.2024

REPRESENTED BY

(V.C. Sekhar)

Sr. General Manager (Regulatory Cell)

# BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

<b>PETITI</b>	ION N	0.:	
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IN THE MATTER OF: Petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Combined Asset consisting of Asset I: Koldam Nalagarh 400 kV D/C (Quad) line along with bays at Nalagarh Substation and Asset II: 400 kV line bays at Ludhiana Sub-station covered under "Transmission System associated with Koldam Hydro-electric Project" in the Northern Region under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

#### **Power Grid Corporation of India Ltd.**

Registered office: B-9, Qutab Institutional Area,

--- PETITIONER

Katwaria Sarai, New Delhi. 110 016.

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

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

Uttar Pradesh Power Corporation Ltd.

---- RESPONDENT(S)

Shakti Bhawan, 14, Ashok Marg

Lucknow - 226 001

Represented by Its Chairman

And others

#### **AFFIDAVIT VERIFYING THE PETITION**

I, V.C. Sekhar, S/O Late Sh. V. Devaiah, working as Senior General Manager (Regulatory Cell) in the Power Grid Corporation of India Ltd., having its registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110 016, do hereby solemnly affirm and state as under: -

24

Mahender S. Punia

Gurnteram

Regn. No. 3999

THE POWERGED ST

- That the deponent is the Senior 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 authorized representative/nominated counsel under my instruction and the contents of the same are true and correct to the best of my knowledge and belief.
- 3. That the contents of Para 01 to 24 of the facts as mentioned in the Petition are true and correct based on my personal knowledge, belief and records maintained in the office and the contents of Para 01 to 24 of the Petition are believed to be true on the basis of the legal advice received.
- 4. That the annexures annexed to the Petition are correct and true copies of the respective originals.
- 5. That the Deponent has not filed any other Petition or Appeal before any other forum or court of law with respect to the subject matter of the dispute

(DEPONENT

#### VERIFICATION

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

(DEPONENT)







### पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड

(भारत सरकार का उद्यम)

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

Mukesh Khanna

ED (Commercial &RC)



#### CENTRAL ELECTRICITY REGULATORY COMMISSION

#### **NEW DELHI**

Petition No. 24/TT/2020

Coram:

Shri I. S. Jha, Member Shri Arun Goyal, Member

Date of Order:11.02.2021

#### In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and truing up of transmission tariff of the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Combined Asset consisting of **Asset I**: Koldam Nalagarh 400 kV D/C (Quad) line along with bays at Nalagarh Sub-station and **Asset II**: 400 kV line bays at Ludhiana Sub-station covered under "Transmission System associated with Koldam Hydro-electric Project" in the Northern Region.

#### And in the matter of:

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

.....Petitioner

#### **Versus**

- Himachal Pradesh State Electricity Board, Vidyut Bhawan, Kumar House Complex Building II, Shimla-171004.
- 2. Haryana Power Purchase Centre, IInd Floor, Shakti Bhawan, Sector-6, Panchkula-134109.
- 3. Punjab State Power Corporation Ltd., Thermal Shed Tia, Near 22 Phatak, Patiala-147001.

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- 4. Power Development Department, Janipura Grid Station, Jammu (Tawi)-180007.
- Power Purchase Agreement Directorate, Uttar Pradesh Power Corporation Ltd. 10th Floor, Shakti Bhawan Extn., 14, Ashok Marg, Lucknow-226001.
- 6. Delhi Transco Ltd., Shakti Sadan, Kotla Road (near ITO), New Delhi.
- 7. Chandigarh Electricity Department, UT-Chandigarh, Div-11, Opposite, Transport Nagar, Industrial Area Phase-I, Sector-9, Chandigarh.
- 8. Uttarakhand Power Corporation Ltd., Urja Bhawan, Kanwali Road, Dehradun.
- 9. Rajasthan Rajya Vidyut Prasaran Nigam Limited 132 kV, GSS RVPNL Sub-station Building Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
- Ajmer Vidyut Vitran Nigam Ltd.,
   132 kV, GSS RVPNL Sub-Station Building,
   Caligiri Road, Malviya Nagar,
   Jaipur-302017 (Rajasthan).
- Jodhpur Vidyut Vitran Nigam Ltd.,
   132 kV, GSS RVPNL Sub-Station Building,
   Caligiri Road, Malviya Nagar,
   Jaipur-302017 (Rajasthan).
- Jaipur Vidyut Vitran Nigam Ltd.,
   132 kV, GSS RVPNL Sub-station Building,
   Caligiri Road, Malviya Nagar,
   Jaipur-302017 (Rajasthan).
- 13. Northern Central Railway, Allahabad.





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- BSES Yamuna Power Ltd., (Delhi Discom),
   B Block, Shakti Kiran, Bldg. (Near Karkadooma Court),
   Karkadooma, 2nd Floor,
   Delhi-110092.
- BSES Rajdhani Power Ltd., (Delhi Discom),
   Bus Terminal, Nehru Place,
   BSES Bhawan, Behind Nehru Place,
   New Delhi-110019.
- Tata Power Delhi Distribution Ltd.,
   33 kV Substation, Building,
   Hudson Lane,
   Kingsway Camp,
   North Delhi-110009.
- 17. New Delhi Municipal Council, Palika Kendra, Sansad Marg, New Delhi-110002.

...Respondents

For Petitioner

Shri A. K. Verma, PGCIL

Shri S. S. Raju, PGCIL Shri B. Dash, PGCIL

For Respondent :

Shri R. B. Sharma, Advocate, BRPL

#### **ORDER**

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as "the Petitioner"), a deemed transmission licensee, for truing up of the tariff from 1.4.2014 to 31.3.2019 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 assets under "Transmission System

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associated with Koldam Hydro-electric Project" in the Northern Region (hereinafter referred to as the 'transmission project'):

**Asset I:** Koldam Nalagarh 400 kV D/C (Quad) line along with bays at Nalagarh Sub-station; and

Asset II: 400 kV line bays at Ludhiana Sub-station.

- 2. The Petitioner has made the following prayers in the instant petition:
  - "1) 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 7 and 8.2 above.
  - 2) 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 Hon'ble Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 7 and 8.2 above for respective block.
  - 3) 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.
  - 4) 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.
  - 5) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.
  - 6) 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 8.8 above.
  - 7) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
  - 8) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the beneficiaries, if GST on transmission is withdrawn from negative list at any time in future. Further, any taxes including GST and duties including cess etc. imposed



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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:
  - a) The administrative approval and expenditure sanction to the transmission project was accorded by the Ministry of Power, Government of India *vide* letter No. 12/19/2003-PG dated 7.9.2005 at an estimated cost of ₹46491 lakh, including Interest During Construction (IDC) of ₹3102 lakh (based on 2<sup>nd</sup> Quarter 2005 price level), consisting of (i) PGCIL portion of work at a cost of ₹16296 lakh including an IDC of ₹1054 lakh and (ii) JV portion of work at a cost of ₹30195 lakh including an IDC of ₹2048 lakh, subject to the condition that the JV must bear the entire revenue risk and must sign Bulk Power Transmission Agreement (BPTA) with the beneficiary states before commencement of the construction activities. Subsequently, the Revised Cost Estimate (RCE) for the transmission project covered under the Petitioner's scope was approved by the Board of Directors of the Petitioner *vide* Memorandum C/CCP/RCE-Koldam dated 16.8.2011 at an estimated revised cost of ₹19933 lakh including IDC of ₹1776 lakh (based on 3<sup>rd</sup> Quarter 2010 price level).
  - b) The investment approval (IA) of the Transmission Project of Koldam Hydro Electric Project was scheduled for completion in time frame of 36 months from the date of investment approval (7.9.2005) to match the commissioning schedule of Koldam Generation Project. As the investment approval was accorded on 7.9.2005, the scheduled date of commercial operation (SCOD) was 1.10.2008. However, Asset-I and Asset-II was put into commercial operation on 1.4.2010 and 1.4.2011 respectively, with a time over-run of 18 months and 30 months respectively.





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c) All the assets that are part of the scope of the transmission project have been covered under instant petition. The dates of commercial operation and time over-run of the assets covered in the instant petition are as under:

Asset	SCOD	COD	Time over-run	Time over- run condoned	
Asset-I	1.10.2008	1.4.2010	18 months	12 months	
Asset-II	1.10.2008	1.4.2011 30 months		30 months	
Combin	ed Asset	1.4.2	011 (Notional	(COD)	

- d) The tariff for the transmission assets from the date of commercial operation to 31.3.2014 was allowed *vide* order dated 9.5.2013 in Petition Nos. 2/TT/2011 and 57/TT/2011.
- e) The transmission tariff was allowed for the 2014-19 period *vide* order dated 25.2.2016 in Petition No. 3/TT/2015. The Annual Fixed Charges (AFC) allowed by the Commission and trued up transmission tariff claimed by the Petitioner for the Combined Asset are as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
AFC approved <i>vide</i> order dated 25.2.2016 in Petition No. 3/TT/2015	3269.19	3186.06	3102.16	3018.66	2935.47	
AFC claimed by the Petitioner based on truing up in the instant petition	3270.47	3192.44	3107.91	3024.34	2944.14	

- 4. The Respondents are distribution licensees and power departments, which are procuring transmission service from the Petitioner, mainly beneficiaries of the Northern Region.
- 5. The Petitioner has served the petition on the Respondents and notice of this petition has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. General Notice dated 12.3.2020 directing the beneficiaries/Respondents to file reply in the matter was also posted on the Commission's website.



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No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. Uttar Pradesh Power Corporation Ltd. (UPPCL), Respondent No.5, has filed its reply vide affidavit dated 21.1.2020. UPPCL has raised the issues of Interest on Loan (IoL) and Return on Equity (RoE), BSES Raidhani Power Ltd. (BRPL), Respondent No.15, has filed its reply dated 13.7.2020 and 21.7.2020. BRPL has raised the issues of re-calculation of Initial Spares, adoption of Indian Accounting Standard 101, computation of income tax, RoE, recovery of tax on truing-up exercise of RoE, applicability and recovery of GST, recovery of security expenses and capital spares and recovery of application filing fee and the expenses. BRPL has filed hard copy of its reply dated 13.7.2020 and 21.7.2020 vide affidavits dated 24.9.2020 after lifting of the lockdown due to Covid-19 pandemic. The Petitioner has filed rejoinder to the reply of UPPCL vide affidavit dated 15.7.2020 and common rejoinder to the reply of BRPL vide affidavit 10.8.2020. The issues raised by Respondent Nos. 5 and 15 and the clarifications given by the Petitioner in regard thereof are dealt with in the relevant paragraphs of this order.

- 6. This order is issued considering the submissions made by the Petitioner in the petition dated 9.12.2019 and Petitioner's affidavit dated 4.5.2020, replies filed by UPPCL and BRPL and rejoinders thereto by the Petitioner whose details are given in the preceding para of this order.
- 7. The hearing in this matter was held on 22.7.2020 through video conference and the order was reserved.





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- 8. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.
- 9. BRPL has submitted that representation of consumer's interest and their participation in the tariff determination proceedings is an integral part of the hearing. Referring to Regulation 18 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, BRPL has submitted that some Association, Forum or body Corporate recognized by the Commission may be asked to represent the interest of consumers during hearings of the instant petition. BRPL has further submitted that one of the said agencies may be instructed to represent the consumer's interest in the instant case and the same is also provided for in section 94(3) of the Electricity Act, 2003.
- 10. We have considered the above submissions of the BRPL. In terms of Regulation 3(6) and (8) of Central Electricity Regulatory Commission (Procedure for Making of Application for Determination of Tariff, Publication of Application and Other Related Matters) Regulations, 2004 (hereinafter referred to as 'the 2004 Application Regulations"). Accordingly, the Petitioner has published Notice in the newspapers and vide affidavit dated 5.3.2020 has submitted that it has carried out the publication of the present tariff application in the newspapers dated 24.1.2020 in various languages. Further, the instant petition has been uploaded on the Petitioner's website. The Notice published in newspaper contained a statement that the application made for determination of tariff is posted on the website of the applicant and the address of the website has also been given. The said Notice contained a statement that "suggestions or objections, if any, on the tariff proposals for determination of tariff may be filed by

Order in Petition No.24/TT/2020



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any person including the beneficiary in the Office of the Secretary, Central Electricity Regulatory Commission with a copy to the applicant at is Corporate Office within 30 days of publication of the notice. No suggestions/objections with regard to the present tariff petitions were received by the Commission before listing of the present petition for hearing. In view of the above, we are of the view that there is no need to engage any agency to represent the interest of consumers.

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

11. The Petitioner has claimed the following trued up tariff for the Combined Asset for the period 1.4.2014 to 31.3.2019:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	988.85	989.17	989.17	989.17	989.17
Interest on Loan	808.75	716.83	624.50	532.16	439.85
Return on Equity	1099.67	1105.08	1104.52	1104.52	1107.49
Interest on Working Capital	82.74	81.28	79.69	78.14	76.67
O&M Expenses	290.46	300.08	310.03	320.35	330.96
Total	3270.47	3192.44	3107.91	3024.34	2944.14

12. The Petitioner has claimed the following trued up Interest on Working Capital (IWC) for the Combined Asset for the period from 1.4.2014 to 31.3.2019:

(₹ in lakh)

	, ,				12 milani
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	24.21	25.01	25.84	26.70	27.58
Maintenance Spares	43.57	45.01	46.50	48.05	49.64
Receivables	545.08	532.07	517.99	504.06	490.69
Total Working Capital	612.86	602.09	590.33	578.81	567.91
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	82.74	81.28	79.69	78.14	76.67





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#### **Initial Spares**

13. The Petitioner has claimed the following Initial Spares with respect to the transmission assets and has further requested to revise the Initial Spares allowed earlier for the transmission assets in order dated 25.2.2016 in Petition No. 3/TT/2015 taking into consideration the judgement of the Appellate Tribunal for Electricity (hereinafter referred to as "APTEL") dated 14.9.2019 in Appeal No. 74 of 2017:

		Initial Spares	claimed	by the Petitioner	•	
Asset type	Capital Cost (₹ in lakh)	Spares claimed (₹ in lakh)	Limit (in %)	Initial spares worked out as per Norms (₹ in lakh)	Allowed in Petition No. 3/TT/2015 (₹ in lakh)	Balance Spares (₹ in lakh)
1	2	3	4	5= (2-3)*4/(100-4)	6	7=5-6
Sub-station	1446.49	67.76	2.50	35.35	33.69	1.66
Transmission Line	17562.50	423.64	0.75	129.51	131.13	(1.62)
Total	19008.99	491.40	-	164.86	164.82	0.04

- 14. The Petitioner has submitted that balance Initial Spares of ₹1.66 lakh against Sub-station head has been added back and ₹1.62 lakh against Transmission Line has been deducted from the capital cost approved as on 31.3.2014 *vide* order dated 25.2.2016 in Petition No. 3/TT/2015. Therefore, net addition of ₹0.04 lakh is being claimed over the capital cost approved as on 31.3.2014.
- 15. BRPL has submitted that the Petitioner's request for application of APTEL's judgment in Appeal No. 74 of 2017 against order in Petition No. 53/TT/2015 in the instant case of 2014-19 truing up is not applicable since the subject judgment pertains to true up of 2009-14 and to the Southern Region. In response, the Petitioner *vide* affidavit dated 10.8.2020 has submitted that the said judgment was in Petition No.





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53/TT/2015 which dealt with truing up of transmission tariff for the 2009-14 tariff period and determination of transmission tariff for the 2014-19 tariff period. APTEL relied on Regulation 8(1) of the 2009 Tariff Regulations since it was prevalent at the time of decision of the petition by this Commission and thereafter the appeal. However, Regulation 13(1) of the 2014 Tariff Regulations is identical and therefore, the decision would be applicable for the 2014-19 period also. The Petitioner has further submitted that the instant petition is filed for truing-up of tariff and is not a review petition. The Petitioner further submitted that the interpretation of the Tariff Regulations or the principle as decided by APTEL will not change with change of region of operation.

- 16. We have considered the submissions of the Petitioner and BRPL. Initial Spares are allowed for the transmission assets as per the APTEL's directions in judgement dated 14.9.2019. As per APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017, the Initial Spares are to be allowed as a percentage of the project cost as a whole as on the cut-off date. Regulation 3(29) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as the "2009 Tariff Regulations") defines "project cost" as under:
  - "3 (29) `original project cost' means the capital expenditure incurred by the generating company or the transmission licensee, as the case may be, within the original scope of the project up to the cut-off date as admitted by the Commission;"
- 17. The transmission assets were put into commercial operation in the 2009-14 period and the transmission assets were combined in the same period. Accordingly, the 2009 Tariff Regulations are applicable for the transmission assets. The Regulation 8(iv) of the 2009 Tariff Regulations specifies the norms for the Initial Spares for the transmission systems as under:





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- "(iv) Transmission system
- (a) Transmission line 0.75%
- (b) Transmission Sub-station 2.5%
- (c) Series Compensation devices and HVDC Station 3.5%
- (d) Gas Insulated Sub-station (GIS) 3.5%"
- 18. It is observed that the Petitioner has claimed the Initial Spares for the transmission assets as a percentage of the project capital cost without considering deduction against Initial Spares. The Initial Spares are allowed for the transmission assets as a percentage, specified in the 2009 Tariff Regulations, of the capital expenditure as on the cut-off date as specified in Regulation 3(29) of the 2009 Tariff Regulations. The aforementioned treatment has been carried out *vide* order dated 25.2.2016 in Petition No. 3/TT/2015 which was based on Auditor Certificate dated 12.11.2014. The cut-off date for latest asset was 31.3.2014. Hence, the capital cost for computation for Initial Spares in the earlier order was considered as per the 2009 Tariff Regulations. Furthermore, on application of the APTEL's judgment dated 14.9.2019 in Appeal No. 74 of 2017, even if clubbing of similar elements with similar percentages is allowed, the excess claim remains the same. Hence, the excess claim of the Petitioner has not been considered.

#### **Capital Cost**

19. The Petitioner has claimed capital cost of ₹18671.98 lakh as on 31.3.2014 which includes addition of ₹0.04 lakh of initial spares over the capital cost of ₹18671.94 approved *vide* order dated 25.2.2016 in Petition No. 3/TT/2015. The capital cost of ₹18671.94 lakh as on 31.3.2014 worked out *vide* order dated 25.2.2016 in Petition No. 3/TT/2015 for the Combined Asset has been considered as opening capital cost as on





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1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations.

20. BRPL has 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 Standard which is resulting in mere increase of tariff. The adoption of Indian Accounting Standard is for the purposes of the Companies Act, 2013 and not for the purposes the Tariff Regulations which provides its own procedure for computation of tariff. In response, the Petitioner vide affidavit dated 10.8.2020 has submitted that IND AS were mandatorily to be adopted as per Ministry of Corporate Affairs (MCA) notification. Petitioner has submitted that the Ministry of Corporate Affairs (MCA), in 2015, had notified the Companies (Indian Accounting Standards (IND AS) Rules 2015, which stipulated mandatory adoption and applicability of IND AS beginning from the accounting period 2016-17 for companies having net worth more than ₹500 crore.. As PGCIL adopted IND AS from 2015-16 onwards, the Gross Block less Accumulated Depreciation as on 1.4.2015 is considered as deemed cost as on the date of transition i.e. 1st April 2015 in the books of accounts. As such, in case of assets which achieved COD before 1.4.2015, the gross block of the assets reflects gross block less accumulated depreciation as on 31.3.2015 in the books of accounts. There has been no change in the capital cost or Additional Capital Expenditure (ACE) considered for claiming transmission tariff on account of adoption of IND AS. For the purpose of computation of tariff, the actual capital cost and ACE has been claimed/ considered. Thus, there is no impact in tariff at all on account of adoption of IND AS at any point of time.

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21. We have considered the submissions of the Petitioner and BRPL. BRPL has contended that the new accounting standards adopted would result in higher tariffs. The Petitioner in response has clarified that the new standards adopted by it would not have any impact on the tariff to be determined by the Commission. The new accounting standards have been adopted by the Petitioner as per the requirement under the Companies Act, 2013. BRPL has merely stated adoption of new accounting standards would lead to higher tariff and has not stated how it would lead to higher tariff. The tariff is determined for the transmission assets owned by the Petitioner on the basis of the applicable tariff regulations, in the instant case the 2014 Tariff Regulations and 2019 Tariff Regulations. As the tariff is determined on the basis of the tariff regulations, we are of the view that the adoption of the new accounting standards by the Petitioner would not have any impact on the tariff that is determined purely on the basis of the applicable tariff regulations.

# Additional Capital Expenditure (ACE)

- 22. The Commission had allowed ACE of ₹12.20 lakh for the Combined Asset during 2014-19 towards balance and retention payments *vide* order dated 25.2.2016 in Petition No. 3/TT/2015. The Petitioner has claimed ACE of ₹12.29 lakh in the instant petition based on actual expenditure on account of balance and retention payments towards the works executed within the cut-off date.
- 23. The claim made in the instant petition is higher than that of approved in earlier order and in response to the Commission's specific query in this matter, the Petitioner *vide* affidavit dated 4.5.2020 submitted that the ACE approved in earlier order was based on projections whereas the ACE now claimed is based on actuals.





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24. We have considered the submissions made by the Petitioner. The date of commercial operation is 1.4.2011 and the cut-off date was 31.3.2014. ACE claimed during 2014-15 is after the cut-off date and is allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations as it is towards balance and retention payments. ACE allowed from 1.4.2014 to 31.3.2019 in respect of the Combined Asset is as under:

ACE allowed for 2014-19 (₹ in lakh)	Reasons
12.29	Balance and retention payments under Regulation 14(3)(v) of the 2014 Tariff Regulations

25. Accordingly, the capital cost considered for the 2014-19 period is as under:

(₹ in lakh)

RCE Apportioned Approved Cost	Capital Cost as on 1.4.2014	ACE	Capital Cost as on 31.3.2019	
		2014-15		
19933	18671.94	12.29	18684.23	

## **Debt-Equity ratio**

26. The Petitioner has claimed Debt-Equity ratio of 70:30 as on the date of commercial operation. Debt-Equity ratio of 70:30 is considered as provided in Regulation 19 of the 2014 Tariff Regulations. The details of Debt-Equity ratio in respect of the Combined Asset as on 1.4.2014 and as on 31.3.2019 are as under:

	Capital Cost as on 1.4.2014		ACE		Capital Cost as on 31.3.2019	
Particulars	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	13070.36	70.00	8.60	70.00	13078.96	70.00
Equity	5601.58	30.00	3.69	30.00	5605.27	30.00
Total	18671.94	100.00	12.29	100.00	18684.23	100.00





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## **Depreciation**

27. The Gross Block during the tariff period 2014-19 has been depreciated at Weighted Average Rate of Depreciation (WAROD). The WAROD has been worked out (as placed in Annexure-I) after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during 2014-19 is as under:

(₹ in lakh)

1,					\
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	18671.94	18684.23	18684.23	18684.23	18684.23
ACE	12.29	0.00	0.00	0.00	0.00
Closing Gross Block	18684.23	18684.23	18684.23	18684.23	18684.23
Average Gross Block	18678.09	18684.23	18684.23	18684.23	18684.23
Weighted average rate of Depreciation (WAROD) (%)	5.29	5.29	5.29	5.29	5.29
Balance useful life of the asset	31	30	29	28	27
Aggregate Depreciable Value	16810.28	16815.81	16815.81	16815.81	16815.81
Depreciation during the year	988.84	989.17	989.17	989.17	989.17
Aggregate Cumulative Depreciation	4883.72	5872.89	6862.06	7851.22	8840.39
Remaining Aggregate Depreciable Value	11926.55	10942.92	9953.75	8964.58	7975.42

28. Accordingly, the details of depreciation approved *vide* order dated 25.2.2016 in Petition No. 3/TT/2015, claimed by the Petitioner in the instant petition and trued up depreciation in the instant order is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 25.2.2016 in Petition No. 3/TT/2015	988.86	989.18	989.18	989.18	989.18
Claimed by the Petitioner in the instant petition	988.85	989.17	989.17	989.17	989.17
Allowed after true-up in this order	988.84	989.17	989.17	989.17	989.17

## Interest on Loan (IoL)

29. The Petitioner has claimed the weighted average rate of IoL, based on its actual loan portfolio and rate of interest.



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30. IoL has been calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. Trued up IoL allowed in respect of the transmission assets is as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	13070.36	13078.96	13078.96	13078.96	13078.96
Cumulative Repayments upto Previous Year	3894.88	4883.72	5872.89	6862.06	7851.22
Net Loan-Opening	9175.48	8195.24	7206.07	6216.91	5227.74
Additions	8.60	0.00	0.00	0.00	0.00
Repayment during the year	988.84	989.17	989.17	989.17	989.17
Net Loan-Closing	8195.24	7206.07	6216.91	5227.74	4238.57
Average Loan	8685.36	7700.66	6711.49	5722.32	4733.16
Weighted Average Rate of Interest on Loan (%)	9.3116	9.3087	9.3050	9.2998	9.2930
Interest on Loan	808.74	716.83	624.50	532.16	439.85

31. Accordingly, the details of loL approved *vide* order dated 25.2.2016 in Petition No. 3/TT/2015, claimed by the Petitioner in the instant petition and trued up loL allowed in the instant order is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 25.2.2016 in Petition No. 3/TT/2015	808.31	716.44	624.17	531.90	439.64
Claimed by the Petitioner in the instant petition	808.75	716.83	624.50	532.16	439.85
Allowed after true-up in this order	808.74	716.83	624.50	532.16	439.85

## Return on Equity (RoE)

32. The Petitioner is entitled to RoE for the transmission assets in accordance with Regulation 24 and Regulation 25 of the 2014 Tariff Regulations. The Petitioner has submitted that they are liable to pay income tax at MAT rates and has claimed the following effective tax rates for the 2014-19 period:





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Year	Claimed effective tax (in %)	Grossed up RoE (Base Rate/1-t) (in %)
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

33. BRPL has submitted that the information regarding Income Tax Assessment submitted by the Petitioner is in respect of the Petitioner as a whole and not in respect of the tax on the transmission business in respect of the Northern Region. Accordingly, the said information is not the relevant information for the purposes of effective tax rate. BRPL has submitted that on the basis of the publicly available financial statements of PGCIL, BRPL has worked out the effective tax rate of the Petitioner which stands at 8.70% for 2014-15 and 'NIL' in 2015-16, 2016-17, 2017-18 and 2018-19. BRPL further submitted that the actual tax rate applicable to the transmission licensee was to be trued up along with truing up of tariff to be determined in accordance with Regulation 6 of the 2009 Tariff Regulations and based on the truing up of tariff if the recovered tariff exceeded the tariff approved, the Petitioner should have refunded to beneficiaries along with simple interest. BRPL has submitted that infrastructure transmission companies have been allowed huge tax benefits under the Income Tax Act, 1961 (hereinafter referred to as "1961 Act") in the form of Tax Holiday for enterprises engaged in infrastructure development etc. as per Section 80 IA and other benefits like the higher depreciation allowed in initial years. BRPL has submitted that the Petitioner has already stated on affidavit that the effective tax rate is zero and accordingly the effective tax rate for the earlier tariff period (2009-14) would





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also be zero since the benefits of the tax holiday under Section 80 IA of the 1961 Act and other benefits like the higher depreciation etc. were also be applicable during in earlier tariff period. BRPL has further submitted that Regulation 49 of the 2014 Tariff Regulations clearly restricts the claim of tax amount only to deferred tax liabilities up to 31st March 2009 whenever it will materialize. BRPL also submitted that the claim of deferred tax is required to be adjusted for the tariff period 2004-09.

34. In response, the Petitioner vide affidavit dated 10.8.2020 has submitted that the Petitioner does not file income tax return on transmission business in respect of particular region as the company having a single PAN and there is no provision in the Income Tax Act, 1961 to file separate returns on the basis of nature of business being undertaken by any entity. In view of above, all the documents in support of Income tax (either returns or assessment orders) are for the Petitioner Company as a whole. The Petitioner has submitted that it has computed effective tax rate based on actual tax paid pursuant to assessment orders for years 2014-15, 2015-16 and 2016-17. The income tax due for 2017-18 and 2018-19 has been deposited and tax returns have already been filed, however assessment orders are yet to be received. The Petitioner has further submitted that after deducting depreciation and tax holiday benefit under normal provision, the income tax for the respective year has been calculated along with surcharge and cess, which works out in between 33.99% to 34.944% during financial years 2014-15 to 2018-19. In case, if the tax computed under normal provision is less than the tax calculated on book profit at the percentage prescribed u/s 115JB [Minimum Alternate Tax (MAT)] then the Company has to pay tax computed as per the provisions of section 115JB of the Act which works out between 20.96% to

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21.5488% (including surcharge and cess). Hence, the Petitioner Company is paying MAT. The Petitioner further submitted that Regulation 15(3) of the 2009 Tariff Regulations provides that RoE shall be grossed up with MAT/ Corporate Income tax rate of the transmission licensee and not the tax rate of the assets or region. The Petitioner has submitted that Form-3 is a system generated form and due to a system error/constraint the header in Form-3 displays 0.00 instead of blank as the effective tax rate is mentioned in the following rows. The aforementioned error has now been rectified. The Petitioner has submitted that it is eligible for claiming the deferred tax liabilities for the period up to 31.3.2009 on materialization on subsequent period i.e. financial year 2009-10 onwards. The Petitioner has further submitted that it is only claiming the reimbursement of Income tax liability, discharged as per the provisions of Income Tax Act, 1961.

- 35. UPPCL has submitted that the grossed up rate of RoE for the period 2016-17 to 2018-19 is not based on the MAT rates approved by the Income Tax Authorities. In response, the Petitioner vide affidavit dated 15.7.2020 has submitted that it has submitted effective tax rates for all the financial years started from 2014-15 to 2018-19 with the instant petition. The details of effective tax rate are supported by Auditor Certificate submitted by the Petitioner. The RoE is grossed up with Effective Tax rate which is MAT rate plus Surcharge and Cess as applicable for respective years.
- 36. We have considered the submissions of the Petitioner and the Respondents, BRPL and UPPCL. The Commission vide order dated 24.1.2021 in Petition No. 136/TT/2020 has already dealt with the concerns of the Respondents. The relevant portion of the order are extracted here under:





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- "52. We have considered the contentions of BRPL and UPPCL and the clarifications given by the Petitioner, BRPL has contended that details of the income tax submitted by the Petitioner are in respect of the Petitioner's company as a whole and it does not pertain to the transmission business in Northern Region. The Petitioner has clarified that every registered company has only one single PAN and it has to file one single return and the Petitioner cannot file income tax separately for each region. BRPL has contended that as per the information available in public domain, the Petitioner has to pay the effective tax rate for 2014-15 @8.70% and for the period 2015-19, it is zero and that the excess recovery made by the Petitioner should be returned to the beneficiaries along with simple interest as provided in Regulation 6 of the 2009 Tariff Regulations. The Petitioner has clarified that the effective tax rate was shown as zero for the period 2015-19 inadvertently due to technical reasons and the Petitioner has paid income tax for the said period. The Petitioner has also clarified that as per the provisions of the 1961 Act, tax has to be computed under normal provisions of Income Tax Rules, 1962 and as per MAT provisions under the section 115JB of the 1961 Act and the assessee will have to pay tax higher of the two. As per the submission, during the tariff period 2014-19, the Petitioner calculated the income tax under regular provisions of the 1961 Act (with tax rates of 33.99% to 34.944%) and the tax was worked out to be lower than the tax payable under MAT rates due to deductions under section 80IA and availability of accelerated depreciation under Income Tax. Thus, the Petitioner has been assessed and paid tax under MAT. We are satisfied with the clarifications given by the Petitioner and convinced that the Petitioner has acted prudently and has complied with the provisions of the 1961 Act and the provisions of the tariff regulations.
- 53. As regards UPPCL's contention that the grossed up rate of RoE for the period 2016-17 to 2018-19 is not based on the MAT rates approved by the Income Tax Authorities, it is observed that the effective rate of tax considered by the Petitioner for 2014-15, 2015-16 and 2016-17 are based on Assessment Orders issued by Income Tax authorities and the effective rate of tax considered for 2017-18 and 2018-19 are based on the Income Tax returns filed for the purpose of grossing up the RoE rate of respective years. In view of the clarification given by the Petitioner, we are of the view that there is no merit in the contention of UPPCL."
- 37. The Commission, *vide* order dated 27.4.2020 in Petition No. 274/TT/2019, has arrived at the effective tax rate for the Petitioner based on the notified MAT rates. The relevant portion of the order dated 27.4.2020 in Petition No. 274/TT/2019 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

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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 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

38. The MAT rates considered in 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 tariff period in terms of the provisions of the 2014 Tariff Regulations.

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

39. The RoE is trued up on the basis of the MAT rate applicable for the respective years and is allowed as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	5601.58	5605.27	5605.27	5605.27	5605.27
Additions	3.69	0.00	0.00	0.00	0.00



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Return on Equity	1098.86	1104.54	1104.54	1104.54	1107.46
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Average Equity	5603.43	5605.27	5605.27	5605.27	5605.27
Closing Equity	5605.27	5605.27	5605.27	5605.27	5605.27

40. The details of RoE approved *vide* order dated 25.2.2016 in Petition No. 3/TT/2015, claimed by the Petitioner in the instant petition and trued up RoE allowed in the instant order is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 25.2.2016 in Petition No. 3/TT/2015	1098.85	1099.21	1099.21	1099.21	1099.21
Claimed by the Petitioner in the instant petition	1099.67	1105.08	1104.52	1104.52	1107.49
Allowed after true-up in this order	1098.86	1104.54	1104.54	1104.54	1107.46

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

41. The O&M Expenses claimed by the Petitioner for the Combined Asset are as under:

O&M Expenses					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
No. of Bays					
400 kV	4	4	4	4	4
Transmission line					
D/C Bundled (4 or more sub- conductors) (km)	46.381	46.381	46.381	46.381	46.381
Total O&M expense (₹ in lakh)	290.46	300.08	310.03	320.35	330.96

42. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission project. Norms specified in respect of the elements covered in the transmission assets are as under:

Particulars	Unit of measure	2014-15	2015-16	2016-17	2017-18	2018-19
Bays		11				





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Particulars	Unit of measure	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV bays	(₹ lakh per bay)	60.30	62.30	64.37	66.51	68.71

Particulars	Unit of measure	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Transmission Lin</b>	es					
D/C Bundled (4 or more sub-conductors)	(₹ lakh per km)	1.062	1.097	1.133	1.171	1.21

43. We have considered the submissions of the Petitioner. The O&M Expenses are allowed for the transmission assets as per the norms specified in the 2014 Tariff Regulations are as under:

O&M Expenses					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
No. of Bays					
400 kV	4	4	4	4	4
Transmission line					
D/C Twin/Triple Conductor (km)	46.381	46.381	46.381	46.381	46.381
Total O&M expense (₹ in lakh)	290.46	300.08	310.03	320.35	330.96

44. Accordingly, O&M Expenses approved *vide* order dated 25.2.2016 in Petition No. 3/TT/2015, claimed by the Petitioner in the instant petition and trued up O&M Expenses allowed in the instant order is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated					
25.2.2016 in Petition No.	290.46	300.08	310.03	320.35	330.96
3/TT/2015					
Claimed by the Petitioner in the	290.46	300.08	310.03	320.35	330.96
instant petition	290.40	300.08	310.03	320.33	330.90
Allowed after true-up in this order	290.46	300.08	310.03	320.35	330.96

### Interest on Working Capital (IWC)

45. IWC for the 2014-19 period has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and allowed as under:



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(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	24.20	25.01	25.84	26.70	27.58
Maintenance Spares	43.57	45.01	46.50	48.05	49.64
Receivables	544.94	531.98	517.99	504.06	490.69
Total Working Capital	612.71	602.00	590.33	578.81	567.91
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on working capital	82.72	81.27	79.69	78.14	76.67

46. Accordingly, the details of IWC approved *vide* order dated 25.2.2016 in Petition No. 3/TT/2015, claimed by the Petitioner in the instant petition and trued up IWC allowed in the instant order is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 25.2.2016 in Petition No. 3/TT/2015	82.71	81.14	79.56	78.01	76.47
Claimed by the Petitioner in the instant petition	82.74	81.28	79.69	78.14	76.67
Allowed after true-up in this order	82.72	81.27	79.69	78.14	76.67

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

47. The trued up annual fixed charges for the transmission assets for the 2014-19 period are shown as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Depreciation	988.84	989.17	989.17	989.17	989.17	
Interest on Loan	808.74	716.83	624.50	532.16	439.85	
Return on Equity	1098.86	1104.54	1104.54	1104.54	1107.46	
Interest on Working Capital	82.72	81.27	79.69	78.14	76.67	
O&M Expenses	290.46	300.08	310.03	320.35	330.96	
Total	3269.62	3191.89	3107.94	3024.36	2944.11	

48. The Annual Transmission Charges approved earlier, claimed by the Petitioner and approved after truing up in the instant order is shown in the table below:





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(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 25.2.2016 in Petition No. 3/TT/2015	3269.19	3186.06	3102.16	3018.66	2935.47
Claimed by the Petitioner in the instant petition	3270.47	3192.44	3107.91	3024.34	2944.14
Allowed after true-up in this order	3269.62	3191.89	3107.94	3024.36	2944.11

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

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

(₹ in lakh)

					/ v III Idiai
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	989.17	989.17	989.17	989.17	182.67
Interest on Loan	347.58	255.32	163.13	71.25	17.25
Return on Equity	1052.78	1052.78	1052.78	1052.78	1052.78
Interest on Working Capital	44.43	43.44	42.35	41.27	28.56
O&M Expenses	194.95	201.60	208.51	215.66	223.03
Total	2628.91	2542.31	2455.94	2370.13	1504.29

50. The Petitioner has claimed the following IWC for the Combined Asset for the 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	16.25	16.80	17.38	17.97	18.59
Maintenance Spares	29.24	30.24	31.28	32.35	33.45
Receivables	323.23	313.44	302.79	292.21	184.95
Total Working Capital	368.72	360.48	351.45	342.53	236.99
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	44.43	43.44	42.35	41.27	28.56

#### **Capital Cost**

- 51. Regulation 19 of the 2019 Tariff Regulations provides as under:
  - **"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.



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## (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 renovation and modernisation as admitted by this Commission in accordance with these regulations;





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- (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 upto 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 de-capitalised 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."
- 52. The Petitioner has claimed a capital cost of ₹18684.27 lakh as on 31.3.2019 for the Combined Asset. However, the capital cost of ₹18684.23 lakh as on 31.3.2019





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has been worked out for the Combined Asset and has been considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

53. The Petitioner has not claimed any ACE for the Combined Asset during the 2019-24 period.

## **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:

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

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

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

Provided that in case of a generating station or a transmission system including



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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 details of debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period for the Combined Asset is as under:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	13078.96	70.00	13078.96	70.00
Equity	5605.27	30.00	5605.27	30.00
Total	18684.23	100.00	18684.23	100.00

#### Depreciation

- 56. Regulation 33 of the 2019 Tariff Regulations provides as under:
  - "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



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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."





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57. The depreciation has been worked out considering the admitted ACE as on 31.3.2019 and accumulated depreciation up to 31.3.2019. WAROD has been worked out (as placed in Annexure-II). The depreciation allowed for the Combined Asset is as under:

(₹ in lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	18684.23	18684.23	18684.23	18684.23	18684.23
Addition during the year					
2019-24 due to projected	0.00	0.00	0.00	0.00	0.00
ACE					
Closing Gross Block	18684.23	18684.23	18684.23	18684.23	18684.23
Average Gross Block	18684.23	18684.23	18684.23	18684.23	18684.23
Weighted average rate of	5.29	5.29	5.29	5.29	Carooding
Depreciation (WAROD) (%)	5.29	5.29	5.29	5.29	Spreading
Balance useful life at the	26	25	24	23	22
beginning of the year	20	25	24	23	
Aggregated Depreciable	16815.81	16815.81	16815.81	16815.81	16815.81
Value	10013.01	10013.01	10013.01	10015.01	10013.01
Depreciation during the	989.17	989.17	989.17	989.17	182.67
year	909.17	303.17	303.17	303.17	102.07
Aggregate Cumulative	9829.56	10818.72	11807.89	12797.06	12979.73
Depreciation	9029.30	10010.72	11007.09	12131.00	12010.13
Remaining Aggregated	6986.25	5997.09	5007.92	4018.75	3836.08
Depreciable Value	0900.23	3931.09	3007.92	4010.75	3030.00

## Interest on Loan (IoL)

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



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- (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.
- (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- (7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing."
- 59. UPPCL has submitted that the Petitioner has negotiated loan portfolios having fixed rate of yearly interest, therefore the question of adjustment of interest on loan due to floating rate of interest applicable during 2019-24 is premature. In response, the Petitioner has submitted that the loan portfolio for the subject project includes loans which have floating rates of interest.
- 60. UPPCL has further submitted that the date of commercial operation of the Combined Asset is 1.4.2011 and twelve years of useful life will elapse on 1.4.2023 which means the entire debt will be reduced to zero at the end of 2022-23, therefore, the loL for balance life will be NIL. In response, the Petitioner vide affidavit dated 15.7.2020 has submitted that it has accounted for same the cumulative repayment of loan upto 2014-15 as approved vide order dated 25.2.2016 in Petition No. 3/TT/2015. The Petitioner further submitted that for periods 2014-19 and 2019-24 yearly





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repayment of loan has been considered equal to depreciation during the year as per the Tariff Regulations. Accordingly, IoL has been calculated considering repayment of loan in line with the Tariff Regulations and the details of the same have been provided in Form-9E.

61. We have considered the submissions of the Petitioner and UPPCL. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period may be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the Combined Asset is as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	13078.96	13078.96	13078.96	13078.96	13078.96
Cumulative Repayments upto Previous Year	8840.39	9829.56	10818.72	11807.89	12797.06
Net Loan-Opening	4238.57	3249.41	2260.24	1271.07	281.91
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	989.17	989.17	989.17	989.17	182.67
Net Loan-Closing	3249.41	2260.24	1271.07	281.91	99.24
Average Loan	3743.99	2754.82	1765.66	776.49	190.57
Weighted Average Rate of Interest on Loan (%)	9.2836	9.2683	9.2392	9.1761	9.0556
Interest on Loan	347.58	255.32	163.13	71.25	17.26

#### Return on Equity (RoE)

- 62. Regulation 30 and Regulation 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 run-of-





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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 shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system

#### Provided further that:

- i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;
  - ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;
- iii. in case of a thermal generating station, with effect from 1.4.2020:
  - rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
  - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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



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

#### Illustration-

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

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

- (ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:
  - (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
  - (b) Estimated Advance Tax for the year on above is Rs 240 crore;
  - (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%:
  - (d) Rate of return on equity = 15.50/(1-0.24) = 20.395%.
- (3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis."
- 63. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. BRPL has submitted that as per Regulation 31(3) of the 2019 Tariff Regulations the Petitioner has a statutory duty to undertake the true up of the grossed-up rate of RoE at the end of every financial year based on actual tax paid. The above statutory function delegated to the transmission licensee cannot be exercised unilaterally but required to be conducted in most impartial manner by summoning all the beneficiaries. In response, the Petitioner *vide* affidavit dated





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10.8.2020 has submitted that the Petitioner pays income tax and files income tax returns in a timely manner. The final tax demand including additional tax, interest, penalty and adjustment for refunds, if any, is decided by the Income Tax Authority through its Assessment Orders, which are beyond the Petitioner's control. The Petitioner has further submitted that for the 2014-19 tariff period, the Commission *vide* order dated 27.4.2020 in Petition No. 274/TT/2019 has approved effective tax rate as notified MAT rates and for 2019-24 tariff period tariff has been admitted with grossing of rate of ROE 18.782% considering MAT rate of 17.472%. Further, any underrecovery or over-recovery of grossed up rate on RoE is taken up at the time of true up for the 2019-24 period.

64. We have considered the submissions of the Petitioner and BRPL. The MAT rate applicable for 2019-20 has been considered for the purpose of RoE for the 2019-24 tariff period, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations at the stage of true up. RoE allowed for the Combined Asset for the 2019-24 tariff period is as under:

(₹ in lakh)

					K III lakii)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	5605.27	5605.27	5605.27	5605.27	5605.27
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	5605.27	5605.27	5605.27	5605.27	5605.27
Average Equity	5605.27	5605.27	5605.27	5605.27	5605.27
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	1052.75	1052.75	1052.75	1052.75	1052.75





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# Operation & Maintenance Expenses (O&M Expenses)

65. The O&M Expenses claimed by the Petitioner for the various elements included in the Combined Asset for the 2019-24 period are as under:

O&M Expenses							
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24		
No. of Bays							
400 kV	4	4	4	4	4		
Transmission line							
D/C Bundled (4 or more sub- conductors) (km)	46.381	46.381	46.381	46.381	46.381		
PLCC							
Cost	251.36	251.36	251.36	251.36	251.36		
Norms (₹ lakh)	2.0% of the original project cost related to such communication system						
Total O&M expense (₹ in lakh)	194.95	201.60	208.51	215.66	223.03		

66. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as under:

# "35. Operation and Maintenance Expenses:

(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 p	er bay)				
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per I	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 (₹ Lak	h 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





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Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

#### Provided further that:

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





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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 substation 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."
- 67. We have considered the submission of the Petitioner. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of capital cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for sub-station have been specified





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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."

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



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68. The O&M Expenses approved for the Combined Asset as per Regulation 35(3) of the 2019 Tariff Regulations for the 2019-24 tariff period are as under:

	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24
O&M Expenses					
No. of Bays					
400 kV	4	4	4	4	4
Transmission line					
D/C Bundled (4 or more sub-conductors) (km)	46.381	46.381	46.381	46.381	46.381
Total O&M expense (₹ in lakh)	189.92	196.57	203.48	210.63	218.00

## Interest on Working Capital (IWC)

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

#### "34. Interest on Working Capital

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

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

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





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- (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;"
- 70. 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 IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) 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, ROI for 2020-21 onwards has been considered as 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points). The components of the working capital and interest thereon allowed are as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	15.83	16.38	16.96	17.55	18.17
Maintenance Spares	28.49	29.49	30.52	31.60	32.70
Receivables	322.58	312.43	301.79	291.22	184.07
Total Working Capital	366.89	358.29	349.26	340.37	234.94
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	44.21	40.31	39.29	38.29	26.43

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

71. The transmission charges allowed for the Combined Asset for the 2019-24 tariff period are as below:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
Depreciation	989.17	989.17	989.17	989.17	182.67	
Interest on Loan	347.58	255.32	163.13	71.25	. 17.26	
Return on Equity	1052.75	1052.75	1052.75	1052.75	1052.75	
Interest on Working Capital	44.21	40.31	39.29	38.29	26.43	
O&M Expenses	189.92	196.57	203.48	210.63	218.00	
Total	2623.62	2534.12	2447.82	2362.10	1497.11	





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#### Filing Fee and the Publication Expenses

- 72. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BRPL has submitted that though the Commission can allow filing fee and publication expenses at its discretion under Regulation 70(1) of the 2019 Tariff Regulations, but the exercise of such discretion is a judicial discretion in the adjudication of tariff for which no justification has been filed by the Petitioner. BRPL also referred to the Commission's order dated 11.9.2008 in Petition No. 129 of 2005 where it declined the claim of Central Power Sector undertakings for allowing the reimbursement of the application filing fee. In response, the Petitioner *vide* affidavit dated 10.8.2020 has submitted that it has requested for reimbursement of expenditure by the beneficiaries towards petition filing fee and publication expense, in terms of Regulation 70(1) of the 2019 Tariff Regulations. Further, the Petitioner also referred to the Commission's order dated 28.3.2016 in Petition No. 137/TT/2015 where it allowed the recovery of petition filing fee and expenditure for publication of notices from beneficiaries on pro-rata basis.
- 73. We have considered the submissions of the Petitioner and BRPL. 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

74. UPPCL has submitted that the Licence Fee is onus of the Petitioner. In response, the Petitioner has submitted that the Regulation 70(3) and (4) of the 2019 Tariff Regulations authorize the Petitioner to bill and recover licensee fee from the





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beneficiaries. License fee is to be reimbursed directly by beneficiaries as per manner specified in Tariff Regulations.

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

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

76. The Petitioner has submitted that, if GST is levied at any rate and at any point of time in future on Charges of Transmission of Electricity, the same shall be borne and additionally paid by the respondent(s) to the Petitioner and the same shall be charged & billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

77. BRPL has submitted that the demand of the Petitioner is premature and need not be considered at this juncture. In response, the Petitioner *vide* affidavit dated 10.8.2020 submitted that currently transmission of electricity by an electric transmission utility is exempt from GST. Hence, the transmission charges currently charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately.





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

#### **Security Expenses**

- 79. The Petitioner has submitted that security expenses for the transmission assets 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 on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.
- 80. BRPL has submitted that the approach adopted by the Petitioner towards claim of security expenses does not warrant the need for IWC as the same is claimed in advance. The Petitioner, in response has submitted that the expenses are not claimed in the instant petition and shall be claimed separately in a separate petition along with other assets.
- 81. We have considered the submissions of the Petitioner and BRPL. We are of the view that the Petitioner should claim security expenses for all the transmission assets





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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 on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

### **Capital Spares**

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

### **Sharing of Transmission Charges**

- 83. The billing, collection and disbursement of the transmission charges approved 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.
- 84. To summarise, the trued-up Annual Fixed Charges allowed for the Combined Asset for the 2014-19 tariff period are as under:

 (₹ in lakh)

 Particulars
 2014-15
 2015-16
 2016-17
 2017-18
 2018-19

 Annual Fixed Charges
 3269.62
 3191.89
 3107.94
 3024.36
 2944.11

The Annual Fixed Charges allowed for the Combined Asset for the 2019-24 tariff period are as under:





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(₹ in lakh)

114						1
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Annual Fixed Charges	2623.62	2534.12	2447.82	2362.10	1497.11

### 85. This order disposes of Petition No. 24/TT/2020.

Sd/ (Arun Goyal) Member Sd/ (I. S. Jha) Member

Order in Petition No.24/TT/2020

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2014-19	Admitted Capital	ACI (₹ in la		Admitted Capital Cost	Rate of		ual Depred	iation as p (₹ in lakh)	er Regulati	ons
Capital Expenditure	Cost as on 1.4.2014/COD (₹ in lakh)	2014-15	Total	as on 31.3.2019 (₹ ìn lakh)	Depreciation as per Regulations	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission Line	17271.66	-	-	17271.66	5.28%	911.94	911.94	911.94	911.94	911.94
Sub-station	1148.92	12.29	12.29	1161.21	5.28%	60.99	61.31	61.31	61.31	61.31
PLCC	251.36	-	-	251.36	6.33%	15.91	15.91	15.91	15.91	15.91
Total	18671.94	12.29	12.29	18684.23		988.84	989.17	989.17	989.17	989.17
				1.00	Gross Block a lakh)	18678.09	18684.23	18684.23	18684.23	18684.23
					Average Rate reclation	5.29%	5.29%	5.29%	5.29%	5.29%





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### Annexure-II

2019-24	Admitted Capital Cost as on 1.4.2019	Projected ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2024	Rate of Depreclation as per	Annual De	oreciation a (₹ in la		ulations
Capital Expenditure	(₹ in lakh)	Total	(₹ in lakh)	Regulations	2019-20	2020-21	2021-22	2022-23
Transmission Line	17271.66	-	17271.66	5.28%	911.94	911.94	911.94	911.94
Sub-station	1161.21	-	1161.21	5.28%	61.31	61.31	61.31	61.31
PLCC	251.36	-	251.36	6.33%	15.91	15.91	15.91	15.91
Total	18684.23	-	18684.23		989.17	989.17	989.17	989.17
			1.7	ross Block lakh)	18684.23	18684.23	18684.23	18684.23
				verage Rate eciation	5.29%	5.29%	5.29%	5.29%

Note: Since the assets will complete 12 years of useful life as on 31.3.2023, the remaining depreciable value of ₹4018.75 lakh as on 31.3.2023 is spread across the balance useful life of 22 years in accordance of Regulation 335) of the 2019 Tariff Regulations. The anual depreciation from 2023-24 onwards is ₹182.67 lakh per annum.



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### **Summary of Tariff**

Name of the	Transmission Licensee:	Power Grid Corporation	on of India Limited	d
Project	Koldam Hydro-electric	Project - Associated Tr	ansmission Syste	em
Element Description	Combined Assets Kold portion) & 400 KV lin	am - Nalagarh 400 KV	D/C (Qurd) Line	alongwith bays at Nalagarh S/s (Part of Powergrid
Region	Northern Region		DOCO Date	Apr 1, 2011

(Amount in Rs. Lakh)

			(7 till Dalli III I t	uni iii RS. Lakii)	
2019-20	2020-21	2021-22	2022-23	2023-24	
366.00	365.00	365.00	365.00	366.00	
366.00	365.00	365.00	365.00	366.00	
989.16	989.16	989.16	989.16	182.66	
347.57	255.29	163.09	71.24	17.26	
1,052.78	1,052.78	1,052.78	1,052.78	1,052.78	
44.21	40.31	36.64	35.70	28.22	
189.92	196.57	203.48	210.63	218.00	
2,623.64	2,534.11	2,445.15	2,359.51	1,498.92	
	366.00 366.00 989.16 347.57 1,052.78 44.21 189.92	366.00 365.00 366.00 365.00 989.16 989.16 347.57 255.29 1,052.78 1,052.78 44.21 40.31 189.92 196.57	366.00     365.00     365.00       366.00     365.00     365.00       989.16     989.16     989.16       347.57     255.29     163.09       1,052.78     1,052.78     1,052.78       44.21     40.31     36.64       189.92     196.57     203.48	2019-20         2020-21         2021-22         2022-23           366.00         365.00         365.00         365.00           366.00         365.00         365.00         365.00           989.16         989.16         989.16         989.16           347.57         255.29         163.09         71.24           1,052.78         1,052.78         1,052.78         1,052.78           44.21         40.31         36.64         35.70           189.92         196.57         203.48         210.63	



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

Name of the Tr	Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Koldam Hydro-electric	Koldam Hydro-electric Project - Associated Transmission System		
Element Description	Combined Assets Kold	am - Nalagarh 400 KV D/C (Qurd) Line along	with bays at Nalaga	Combined Assets Koldam - Nalagarh 400 KV D/C (Qurd) Line alongwith bays at Nalagarh S/s (Part of Powergrid portion) & 400 KV lin
Region	Northern Region		DOCO Date	Apr 1, 2011

1. Transmission Lines

9 '0'.	
Covered in the present petition (es/No If No, Petition No.	
Cover per per Yes/No	>
(Amount in Rs. Lakh)  Covered in the present petition commercial Yes/No If No, operation No.	46.381 Apr 1, 2011
Line Length C Km	46.381
Line Reactor (Including Switchable Reactor)	0.000
Line	0.000
Voltage Level KV	400 KV 0.000 0.000
Type of S/C or No of Sub- Voltage Line Line AC/ D/C Conductors Level Bays HVDC KV	4
S/C or D/C	DC
Type of Line AC/ HVDC	AC

Summary:

400 KV D/C KOLDAM - NALAGARH LINE

Name of Line

CUIT (BUNDLE CONDUCTOR WITH FOUR SUB-CONDUCTORS)       1.322       1.368         e of O&M as per Regulation       46.381	O&M Expenses For the Transmission Lines Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
r Regulation 1.368 1.368 46.381 46.381 46.381 46.381	DOUBLE CIRCUIT (BUNDLE CONDUCTOR WITH FOUR SUB-CONDUCTORS)					
46.381 46.381 61.32 63.45	Normative Rate of O&M as per Regulation	1.322	1.368	1.416	1.466	1.517
61 32	No. of Units - ( Length in KM )	46.381	46.381	46.381	46.381	46.381
	O&M Claimed	61.32	63.45	65.68	67.99	70.36

# 2. Sub Station

	Type of	Voltage	No. of Transfor		No.	No. of Bays		Σ	VA/MV,	MVA/MVAR Capacity	acity	Date of	S = P	Covered in the present
Name of Sub-station	Substation Level R	Level	Reactor/ SVC etc. (with capacity)	765 KV	400 KY	220 KV	132 KV	765 KV	400 KV	220 KV	132 K	Comm.	No X	Ye If No, s/ Petitio No n No.
Nalagarh:KOLDAM I AND II BAYS		400 KV			2.000							Apr 1, 2011 Y	>	
Ludhiana:KOLDAM I AND II BAYS		400 KV			2.000							Apr 1, 2011	>-	

## Summary:

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





Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M					
Transmission Line	61.32	63.45	65.68	65'29	70.36
Substation	128.60	133.12	137.80	142.64	147.64
Communication System	00.0	00.00	0.00	00.0	00.0
Total Normative O&M	189.92	196.57	203.48	210.63	218.00
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition )					
*Security Expenses	00.0	00.0	0.00	00.0	00:00
*Actual Capital Spare consumed	00.0	00.0	0.00	00.0	00:00
*Insurance Premium Paid	00.0	00.00	0.00	00.0	00.0
Total O&M	189.92	196.57	203.48	210.63	218.00



### Normative parameters considered for tariff computations

Name of the T	Fransmission Licensee	Power Grid Corporat	tion of India Limit	ed
Project	Koldam Hydro-electric P	Project - Associated Tr	ansmission Syste	em
Element Description	Combined Assets Kolda portion) & 400 KV lin	m - Nalagarh 400 KV	D/C (Qurd) Line	alongwith bays at Nalagarh S/s (Part of Powergrid
Region	Northern Region		DOCO Date	Apr 1, 2011

(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 %)		,	1			
Grossed up Rate of ROE (in %)	19.758	18.782	18.782	18.782	18.782	18.782
Target availability - AC System (in %)	98.00	98.00	98.00	98.00	98.00	98.00
Target availability - HVDC System (in %)	96.00	96.00	96.00	96.00	96.00	96.00
Norms for sub-station Bays (Rs Lakh per bay)					-	
765 kV	96.20	45.01	46.60	48.23	49.93	51.68
400 kV	68.71	32.15	33.28	34.45	35.66	36.91
220 kV	48.10	22.51	23.30	24.12	24.96	25.84
132 kV and below	34.36	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (Rs Lakh per MVA)						
765 kV	0.00	0.491	0.508	0.526	0.545	0.564
400 kV	0.00	0.358	0.371	0.384	0.398	0.411
220 kV	0.00	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.00	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (Rs Lakh per km)						
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.806	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub- conductors)	0.691	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.461	0.503	0.521	0.539	0.558	0.578

Page 1 of 2

0256006 : Truing Up: Combined Assets Koldam - Nalagarh 400 KV D/C | Ourd | Line alongwith bays at Nalagarh S/s (Part of Powergrid portion) & 400 KV lin

Single Circuit (Single Conductor)	0.23	0.252	0.26	0.27	0.279	0.289
Single Official (Offigic Obliquetor)	0.20	0.202	0.20	0.2,1	0.210	0.200
Double Circuit (Bundled conductor with four or more sub-conductors)	1.21	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.806	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.346	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.123	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.413	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations						
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	0.00	834.00	864.00	894.00	925.00	958.00
Gazuwaka HVDC Back-to-Back station (Rs. Lakh per 500 MW)	0.00	1,666.00	1,725.00	1,785.00	1,848.00	1,913.00
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	0.00	2,252.00	2,331.00	2,413.00	2,498.00	2,586.00
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	0.00	2,468.00	2,555.00	2,645.00	2,738.00	2,834.00
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	0.00	1,696.00	1,756.00	1,817.00	1,881.00	1,947.00
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	0.00	2,563.00	2,653.00	2,746.00	2,842.00	2,942.00

### **Calculation of ROE**

Name of the Transmission Licensee Power Grid Corporation of India Limited							
Project	Project Koldam Hydro-electric Project - Associated Transmission System						
Element Description							
Region	Northern Region		DOCO Date	Apr 1, 2011			

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the year	366.00	365.00	365.00	365.00	366.00
No. of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
Opening Normative Equity	5,605.27	5,605.27	5,605.27	5,605.27	5,605.27
Less: Adjustment in Equity*	0.00	0.00	0.00	0.00	0.00
Adjustment during the year	0.00	0.00	0.00	0.00	0.00
Net opening equity (Normal)	5,605.27	5,605.27	5,605.27	5,605.27	5,605.27
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	5,605.27	5,605.27	5,605.27	5,605.27	5,605.27
Average Normative Equity	5,605.27	5,605.27	5,605.27	5,605.27	5,605.27
Rate of return on Equity (%)	18.782	18.782	18.782	18.782	. 18.782
Reduced rate of 1% decided by commission under Regulation 30(2) (if any)	0.00	0.00	0.00	0.00	0.00
Effective rate of ROE	15.50	15.50	15.50	15.50	15.50
MAT/Corporate Rate	17.472	17.472	17.472	17.472	17.472
Grossed up rate of ROE	18.782	18.782	18.782	18.782	18.782
Return on Equity	1,052.78	1,052.78	1,052.78	1,052.78	1,052.78
Pro rata return on Equity	1,052.78	1,052.78	1,052.78	1,052.78	1,052.78

V (Retitioner)

### Calculation of WAR of interest on actual loan

Name of the Transmission Licensee Power Grid Corporation of India Limited							
Project Koldam Hydro-electric Project - Associated Transmission System							
Element Description							
Region	Northern Region	DOCO Date Apr 1, 2011					

(Amount in Rs. Lakh)

			(Allibulit ili Na.		
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
BOND XXIV -DOCO					
Gross Loan- Opening	544.00	544.00	544.00	544.00	544.00
Cumulative repayments of Loans upto previous year	408.00	453.33	498.67	544.00	544.00
Net loan-Opening	136.00	90.67	45.33	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	45.33	45.33	45.33	0.00	0.00
Net Loan-Closing	90.67	45.34	0.00	0.00	0.00
Average Net Loan	113.34	68.01	22.67	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.95	9.95	9.95	9.95	9.95
Interest on loan	11.2773	6.767	2.2557	0.00	0.00

BOND XXVII -DOCO					
Gross Loan- Opening	5,600.00	5,600.00	5,600.00	5,600.00	5,600.00
Cumulative repayments of Loans upto previous year	3,733.33	4,200.00	4,666.67	5,133.33	5,600.00
Net loan-Opening	1,866.67	1,400.00	933.33	466.67	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	466.67	466.67	466.67	466.67	0.00
Net Loan-Closing	1,400.00	933.33	466.66	0.00	0.00

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Average Net Loan	1,633.34	1,166.67	700.00	233.34	0.00
Rate of Interest on Loan on Annual Basis	9.47	9.47	9.47	9.47	9.47
Interest on loan	154.6773	110.4836	66.29	22.0973	0.00

BOND XXVIII -DOCO					
Gross Loan- Opening	4,100.00	4,100.00	4,100.00	4,100.00	4,100.00
Cumulative repayments of Loans upto previous year	2,391.67	2,733.33	3,075.00	3,416.67	3,758.33
Net loan-Opening	1,708.33	1,366.67	1,025.00	683.33	341.67
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	341.67	341.67	341.67	341.67	341.67
Net Loan-Closing	1,366.66	1,025.00	683.33	341.66	0.00
Average Net Loan	1,537.50	1,195.84	854.17	512.50	170.84
Rate of Interest on Loan on Annual Basis	9.33	9.33	9.33	9.33	9.33
Interest on loan	143.4488	111.5719	79.6941	47.8163	15.9394

BOND XXIX -DOCO					
Gross Loan- Opening	641.00	641.00	641.00	641.00	641.00
Cumulative repayments of Loans upto previous year	373.92	427.33	480.75	534.17	587.58
Net loan-Opening	267.08	213.67	160.25	106.83	53.42
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	53.42	53.42	53.42	53.42	53.42
Net Loan-Closing	213.66	160.25	106.83	53.41	0.00
Average Net Loan	240.37	186.96	133.54	80.12	26.71
Rate of Interest on Loan on Annual Basis	9.20	9.20	9.20	9.20	9.20
Interest on loan	22.114	17.2003	12.2857	7.371	2.4573

BOND XXX -DOCO					
Gross Loan- Opening	626.00	626.00	626.00	626.00	626.00
Cumulative repayments of Loans upto previous year	313.00	365.17	417.33	469.50	521.67
Net loan-Opening	313.00	260.83	208.67	156.50	104.33
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	52.17	52.17	52.17	52.17	52.17
Net Loan-Closing	260.83	208.66	156.50	104.33	52.16
Average Net Loan	286.92	234.75	182.59	130.42	78.25
Rate of Interest on Loan on Annual Basis	8.80	8.80	8.80	8.80	8.80
Interest on loan	25.249	20.658	16.0679	11.477	6.886

BOND XXXI -DOCO					
Gross Loan- Opening	869.00	869.00	869.00	869.00	869.00
Cumulative repayments of Loans upto previous year	434.50	506.92	579.33	651.75	724.17
Net loan-Opening	434.50	362.08	289.67	217.25	144.83
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	72.42	72.42	72.42	72.42	72.42
Net Loan-Closing	362.08	289.66	217.25	144.83	72.41
Average Net Loan	398.29	325.87	253.46	181.04	108.62
Rate of Interest on Loan on Annual Basis	8.90	8.90	8.90	8.90	8.90
Interest on loan	35.4478	29.0024	22.5579	16.1126	9.6672

BOND XXXIII -DOCO					
Gross Loan- Opening	139.00	139.00	139.00	139.00	139.00
Cumulative repayments of Loans upto previous year	57.92	69.50	81.08	92.67	104.25
Net loan-Opening	81.08	69.50	57.92	46.33	34.75

Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	11.58	11.58	11.58	11.58	11.58
Net Loan-Closing	69.50	57.92	46.34	34.75	23.17
Average Net Loan	75.29	63.71	52.13	40.54	28.96
Rate of Interest on Loan on Annual Basis	8.64	8.64	8.64	8.64	8.64
Interest on loan	6.5051	5.5045	4.504	3.5027	2.5021

BOND-XXXIV -ADDCAP FOR 2011-2012					
Gross Loan- Opening	162.11	162.11	162.11	162.11	162.11
Cumulative repayments of Loans upto previous year	67.55	81.06	94.56	108.07	121.58
Net loan-Opening	94.56	81.05	67.55	54.04	40.53
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	13.51	13.51	13.51	13.51	13.51
Net Loan-Closing	81.05	67.54	54.04	40.53	27.02
Average Net Loan	87.81	74.30	60.80	47.29	33.78
Rate of Interest on Loan on Annual Basis	8.84	8.84	8.84	8.84	8.84
Interest on loan	7.7624	6.5681	5.3747	4.1804	2.9862

BOND-XXXIV -DOCO					
Gross Loan- Opening	194.13	194.13	194.13	194.13	194.13
Cumulative repayments of Loans upto previous year	80.89	97.07	113.24	129.42	145.60
Net loan-Opening	113.24	97.06	80.89	64.71	48.53
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	16.18	16.18	16.18	16.18	16.18
Net Loan-Closing	97.06	80.88	64.71	48.53	32.35
Average Net Loan	105.15	88.97	72.80	56.62	40.44

Rate of Interest on Loan on Annual Basis	8.84	8.84	8.84	8.84	8.84	
Interest on loan	9.2953	7.8649	6.4355	5.0052	3.5749	

BOND XXXVI -ADDCAP FOR 2011-2012					
Gross Loan- Opening	60.00	60.00	60.00	60.00	60.00
Cumulative repayments of Loans upto previous year	12.00	16.00	20.00	24.00	28.00
Net loan-Opening	48.00	44.00	40.00	36.00	32.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	4.00	4.00	4.00	4.00	4.00
Net Loan-Closing	44.00	40.00	36.00	32.00	28.00
Average Net Loan	46.00	42.00	38.00	34.00	30.00
Rate of Interest on Loan on Annual Basis	9.35	9.35	9.35	9.35	9.35
Interest on loan	4.301	3.927	3.553	3.179	2.805

BOND XXXVII -ADDCAP FOR 2011-2012					
Gross Loan- Opening	135.12	135.12	135.12	135.12	135.12
Cumulative repayments of Loans upto previous year	45.04	56.30	67.56	78.82	90.08
Net loan-Opening	90.08	78.82	67.56	56.30	45.04
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	11.26	11.26	11.26	11.26	11.26
Net Loan-Closing	78.82	67.56	56.30	45.04	33.78
Average Net Loan	84.45	73.19	61.93	50.67	39.41
Rate of Interest on Loan on Annual Basis	9.25	9.25	9.25	9.25	9.25
Interest on loan	7.8116	6.7701	5.7285	4.687	3.6454

### SBI (2014-15) -ADDCAP FOR 2014-15

Gross Loan- Opening	4.22	4.22	4.22	4.22	4.22
Cumulative repayments of Loans upto previous year	0.00	0.42	0.84	1.27	1.69
Net loan-Opening	4.22	3.80	3.38	2.95	2.53
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.42	0.42	0.42	0.42	0.42
Net Loan-Closing	3.80	3.38	2.96	2.53	2.11
Average Net Loan	4.01	3.59	3.17	2.74	2.32
Rate of Interest on Loan on Annual Basis	7.993319	6.894349	6.65	7.243625	8.135644
Interest on loan	0.3205	0.2475	0.2108	0.1985	0.1887

BOND XLVII -ADDCAP FOR 2014-15					
Gross Loan- Opening	4.10	4.10	4.10	4.10	4.10
Cumulative repayments of Loans upto previous year	0.34	0.68	1.03	1.37	1.71
Net loan-Opening	3.76	3.42	3.07	2.73	2.39
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.34	0.34	0.34	0.34	0.34
Net Loan-Closing	3.42	3.08	2.73	2.39	2.05
Average Net Loan	3.59	3.25	2.90	2.56	2.22
Rate of Interest on Loan on Annual Basis	8.93	8.93	8.93	8.93	8.93
Interest on loan	0.3206	0.2902	0.259	0.2286	0.1982

BOND XLVIII -ADDCAP FOR 2014-15					
Gross Loan- Opening	0.28	0.28	0.28	0.28	0.28
Cumulative repayments of Loans upto previous year	0.00	0.07	0.07	0.14	0.14
Net loan-Opening	0.28	0.21	0.21	0.14	0.14
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
			(8)	Va	

Less: Repayment(s) of loan during the year	0.07	0.00	0.07	0.00	0.00
Net Loan-Closing	0.21	0.21	0.14	0.14	0.14
Average Net Loan	0.25	0.21	0.18	0.14	0.14
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.0205	0.0172	0.0148	0.0115	0.0115

### Summary

Gross Loan- Opening	13,078.96	13,078.96	13,078.96	13,078.96	13,078.96
Cumulative repayments of Loans upto previous year	7,918.16	9,007.18	10,096.13	11,185.18	12,228.80
Net loan-Opening	5,160.80	4,071.78	2,982.83	1,893.78	850.16
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	1,089.04	1,088.97	1,089.04	1,043.64	576.97
Net Loan-Closing	4,071.76	2,982.81	1,893.79	850.14	273.19
Average Net Loan	4,616.31	3,527.32	2,438.34	1,371.98	561.69
Rate of Interest on Loan on Annual Basis	9.2834	9.2669	9.2371	9.1741	9.0552
Interest on loan	428.5512	326.8727	225.2316	125.8671	50.8619

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

Name of the Transmission Licensee Power Grid Corporation of India Limited							
Project	Koldam Hydro-electric F	roject - Associated Transmission	System				
Element Description							
Region	Northern Region DOCO Date Apr 1, 2011						

(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	13,078.96	13,078.96	13,078.96	13,078.96	13,078.96
Cumulative repayments of Normative loan upto previous year	8,840.41	9,829.57	10,818.73	11,807.89	12,797.05
Net normative loan-Opening	4,238.55	3,249.39	2,260.23	1,271.07	281.91
Addition in normative loan towards the ACE	0.00	0.00	0.00	0.00	0.00
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	989.16	989.16	989.16	989.16	182.66
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	3,249.39	2,260.23	1,271.07	281.91	99.25
Average normative loan	3,743.97	2,754.81	1,765.65	776.49	190.58
Weighted Average Rate of interest on actual loan	9.2834	9.2669	9.2371	9.1741	9.0552
Interest on normative loan	347.57	255.29	163.09	71.24	17.26
Pro rata interest on normative loan	347.57	255.29	163.09	71.24	17.26



### Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the 1	Fransmission Licensee	Power Grid Corpora	ition of India Limited	d <sup>a</sup>		
Project Koldam Hydro-electric Project - Associated Transmission System						
Element Description						
Region	Northern Region DOCO Date Apr 1, 2011					

(Amount in Rs. Lakh)

					(Amount in No. Lakir)		
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	17,271.66	0.00	17,271.66	17,271.66	5.28	911.94	
Sub Station	1,161.21	0.00	1,161.21	1,161.21	5.28	61.31	
Comm. Sys. excluding Fiber Optic	251.36	0.00	251.36	251.36	6.33	15.91	
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	18,684.23	0.00	18,684.23	18,684.23	0.00	989.16	
Weighted Average Rate of Depreciation(%)					5.29409		

2020-21						
Land(Freehold)	0.00	0.00	0.00	0.00	CORPO.00	0.00

Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	17,271.66	0.00	17,271.66	17,271.66	5.28	911.94
Sub Station	1,161.21	0.00	1,161.21	1,161.21	5.28	61.31
Comm. Sys. excluding Fiber Optic	251.36	0.00	251.36	251.36	6.33	15.91
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	18,684.23	0.00	18,684.23	18,684.23	0.00	989.16
Weighted Average Rate of Depreciation(%)					5.29409	

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	17,271.66	0.00	17,271.66	17,271.66	5.28	911.94
Sub Station	1,161.21	0.00	1,161.21	1,161.21	5.28	61.31
Comm. Sys. excluding Fiber Optic	251.36	0.00	251.36	251.36	6.33	15.91
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	18,684.23	0.00	18,684.23	18,684.23	0.00	989.16
Weighted Average Rate of Depreciation(%)					5.29409	

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	17,271.66	0.00	17,271.66	17,271.66	5.28	911.94
Sub Station	1,161.21	0.00	1,161.21	1,161.21	5.28	61.31
Comm. Sys. excluding Fiber Optic	251.36	0.00	251.36	251.36	6.33	15.91
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	18,684.23	0.00	18,684.23	18,684.23	0.00	989.16
Weighted Average Rate of Depreciation(%)					5.29409	

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	17,271.66	0.00	17,271.66	17,271.66	5.28	169.86
Sub Station	1,161.21	0.00	1,161.21	1,161.21	5.28	11.41
Comm. Sys. excluding Fiber Optic	251.36	0.00	251.36	251.36	6.33	1.39
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	18,684.23	0.00	5 <sup>18,684.23</sup>	18,684.23	0.00	182.66

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0256006 : Truing Up: Combined Assets Koldam - Nalagam 400 KV DVC (Qurd) Line along with plays at Nalagam S/s (Part of Powergrid portion) & 400 KV lin

Weighted Average Rate of			0.977616	
Depreciation(%)			0.977010	

### **Statement of Depreciation**

Name of the	d					
Project	Koldam Hydro-electric F	Project - Associated Tr	ansmission Syste	m		
Element Combined Assets Koldam - Nalagarh 400 KV D/C (Qurd) Line alongwith bays at Nalagarh S/s (Part of Power Description) & 400 KV lin						
Region	egion Northern Region DOCO Date Apr 1, 2011					

(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	34.00	34.00	34.00	34.00	34.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	8.00	9.00	10.00	11.00	12.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	26.00	25.00	24.00	23.00	22.00
Capital Base					
1.4 Opening capital cost	18,684.23	18,684.23	18,684.23	18,684.23	18,684.23
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	18,684.23	18,684.23	18,684.23	18,684.23	18,684.23
1.8 Average capital cost	18,684.23	18,684.23	18,684.23	18,684.23	18,684.23
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	18,684.23	18,684.23	18,684.23	18,684.23	18,684.23
1.12 Depreciable Value(1.10+90% of 1.11)	16,815.80	16,815.80	16,815.80	16,815.80	16,815.80
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	5.29409	5:29409	5.29409	5.29409	0.977616

1.14 Depreciation(for the period)	989.16	989.16	989.16	989.16	182.66
1.15 Depreciation(Annualised)	989.16	989.16	989.16	989.16	182.66
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	8,840.41	9,829.57	10,818.73	11,807.89	12,797.05
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	9,829.57	10,818.73	11,807.89	12,797.05	12,979.71

Name of the	Transmission Licensee	Power Grid Corporation of Ir	dia Limited	d
Project	Koldam Hydro-electric Pro	ject - Associated Transmiss	on System	1
Element Description	Combined Assets Koldam portion) & 400 KV lin	- Nalagarh 400 KV D/C (Qu	d) Line ald	ongwith bays at Nalagarh S/s (Part of Powergrid
Region	Northern Region	DOCO	Date	Apr 1, 2011

(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	15.83	16.38	16.96	17.55	18.17
Maintenance spares 15% of O&M Expenses	28.49	29.49	30.52	31.59	32.70
Receivables equivalent to 45 days of AFC	322.58	312.42	301.46	290.90	184.29
Total Working capital	366.90	358.29	348.94	340.04	235.16
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	44.21	40.31	36.64	35.70	28.22
Pro rata interest on working capital	44.21	40.31	36.64	35.70	28.22

### **Summary of Tariff**

Name of the	Transmission Licensee:	Power Grid Corporation of India Limited	
Project	Koldam Hydro-electric	Project - Associated Transmission System	1
Element Description	Combined Assets Kold portion) & 400 KV lin	am - Nalagarh 400 KV D/C (Qurd) Line ak	ongwith bays at Nalagarh S/s (Part of Powergrid
Region	Northern Region	DOCO Date	Apr 1, 2011

(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	182.66	182.66	182.66	182.68	182.66
Interest on Loan-Form No. 9E	4.45	0.00	0.00	0.00	0.00
Return on Equity-Form No. 8	1,052.78	1,052.78	1,052.78	1,052.78	1,052.78
Int. on Working capital-Form No.11	26.13	26.46	26.89	27.28	27.80
Op. and maintenance-Form No.2	178.00	187.35	197.16	207.57	218.43
Total AFC	1,444.02	1,449.25	1,459.49	1,470.31	1,481.67



# 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	Koldam Hydro-electric	Koldam Hydro-electric Project - Associated Transmission System		
Element Description	Combined Assets Kolc	lam - Nalagarh 400 KV D/C (Qurd) Line along	with bays at Nalaga	Combined Assets Koldam - Nalagarh 400 KV D/C (Qurd) Line alongwith bays at Nalagarh S/s (Part of Powergrid portion) & 400 KV lin
Region	Northern Region		DOCO Date	Apr 1, 2011

1. Transmission Lines

I. II ALI DI LI LI LA SILI LA								(Amount in Rs. Lakh)	Rs. Lakh	
	Type of	S/C or	No of Sub-	Voltage	Line	Line Reactor	Line	Date of	Covere pre:	Covered in the present petition
Name of Line	Line AC/ HVDC	D/C	Conductors	Level	Bays	D/C Conductors Level Bays (Including KV Switchable Reactor)	Length	Length Commercial Yes/No If No, Km operation Petition No.	Yes/No	If No, Petition No.
400 KV D/C KOLDAM - NALAGARH LINE	AC	DC DC	4	400 KV	400 KV 0.000 0.000	0.000	46.381	46.381 Apr 1, 2011	>	

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 (BUNDLE CONDUCTOR WITH FOUR SUB-CONDUCTORS)					
Normative Rate of O&M as per Regulation	1.291	1,359	1.43	1.506	1.585
No. of Units - ( Length in KM )	46.381	46.381	46.381	46.381	46.381
O&M Claimed	59.88	63.03	66.32	69.85	73.51

# 2. Sub Station

	Type of	Voltage	No. of Transfor ms/		No.	No. of Bays		2	VA/MV	MVA/MVAR Capacity	acity	Date of	S E F	Covered in the present
Name of Sub-station	Substation Level R KV S C C C C C C C C C C C C C C C C C C	Level	Reactor/ SVC etc. (with capacity)	765 KV	400 XV	220 KV	¥ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	765 KV	400 KV	220 KV	132 KV	Comm.	N S S	oetitio n No.
Nalagarh:KOLDAM I AND II BAYS		400 KV			2.000							Apr 1, 2011 Y	>	
Ludhiana:KOLDAM I AND II BAYS		400 KV			2.000		\$0					Apr 1, 2011	>	

## Summary:

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





A) Normative O&M  Transmission Line  Substation  Communication System  Total Normative O&M  T					
same is not being claimed					
same is not being claimed	59.88	63.03	66.32	69.85	73.51
17 ame is not being claimed	118.12	124.32	130.84	137.72	144.92
same is not being claimed	0.00	0.00	00.0	00.00	0.00
	178.00	187.35	197.16	207.57	218.43
*Security Expenses	00:00	0.00	00.0	00.00	0.00
*Actual Capital Spare consumed 0.00	0.00	0.00	00.0	00.0	0.00
*Insurance Premium Paid 0.00	0.00	0.00	00.0	00.00	0.00
Total O&M 178.00	178.00	187.35	197.16	207.57	218.43



### Normative parameters considered for tariff computations

Name of the	Transmission Licensee	Power Grid Corporat	tion of India Limite	ed
Project	Koldam Hydro-electric P	roject - Associated Tr	ansmission Syste	m
Element Description	Combined Assets Kolda portion) & 400 KV lin	m - Nalagarh 400 KV	D/C (Qurd) Line a	alongwith bays at Nalagarh S/s (Part of Powergrid
Region	Northern Region		DOCO Date	Apr 1, 2011

(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	V CAD 305	0.322

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

### **Calculation of ROE**

Name of the Transmission Licensee Power Grid Corporation of India Limited						
Project Koldam Hydro-electric Project - Associated Transmission System						
Element Combined Assets Koldam - Nalagarh 400 KV D/C (Qurd) Line alongwith bays at Nalagarh S/s (Part of Powergrid portion) & 400 KV lin						
Region	Northern Region		Apr 1, 2011			

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the year	365.00	365.00	365.00	366.00	365.00
No. of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
Opening Normative Equity	5,605.27	5,605.27	5,605.27	5,605.27	5,605.27
Less: Adjustment in Equity*	0.00	0.00	0.00	0.00	0.00
Adjustment during the year	0.00	0.00	0.00	0.00	0.00
Net opening equity (Normal)	5,605.27	5,605.27	5,605.27	5,605.27	5,605.27
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	5,605.27	5,605.27	5,605.27	5,605.27	5,605.27
Average Normative Equity	5,605.27	5,605.27	5,605.27	5,605.27	5,605.27
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	1,052.78	1,052.78	1,052.78	1,052.78	1,052.78
Return on Equity	1,052.78	1,052.78	1,052.78	1,052.78	1,052.78

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(Petitioner)

at Nalagarh S/s (Part of Powergrid

0256006 : Combined Assets Koldam - Nalagarh 400 KV D/C (Qura; Line along portion) & 400 KV lin

### Calculation of WAR of interest on actual loan

Name of the Transmission Licensee Power Grid Corporation of India Limited						
Project Koldam Hydro-electric Project - Associated Transmission System						
Element Description Combined Assets Koldam - Nalagarh 400 KV D/C (Qurd) Line alongwith bays at Nalagarh S/s (Part of Powergrid portion) & 400 KV lin						
Region	Northern Region		DOCO Date	Apr 1, 2011		

(Amount in Rs. Lakh)

	V III OUT III I I I I					
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29	
BOND XXIV -DOCO						
Gross Loan- Opening	544.00	544.00	544.00	544.00	544.00	
Cumulative repayments of Loans upto previous year	544.00	544.00	544.00	544.00	544.00	
Net loan-Opening	0.00	0.00	0.00	0.00	0.00	
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00	
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00	
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00	
Average Net Loan	0.00	0.00	0.00	0.00	0.00	
Rate of Interest on Loan on Annual Basis	9.95	9.95	9.95	9.95	9.95	
Interest on loan	0.00	0.00	0.00	0.00	0.00	
					-	

BOND XXVII -DOCO					
Gross Loan- Opening	5,600.00	5,600.00	5,600.00	5,600.00	5,600.00
Cumulative repayments of Loans upto previous year	5,600.00	5,600.00	5,600.00	5,600.00	5,600.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00

Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.47	9.47	9.47	9.47	9.47
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XXVIII -DOCO					
Gross Loan- Opening	4,100.00	4,100.00	4,100.00	4,100.00	4,100.00
Cumulative repayments of Loans upto previous year	4,100.00	4,100.00	4,100.00	4,100.00	4,100.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.33	9.33	9.33	9.33	9.33
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XXIX -DOCO					
Gross Loan- Opening	641.00	641.00	641.00	641.00	641.00
Cumulative repayments of Loans upto previous year	641.00	641.00	641.00	641.00	641.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.20	9.20	9.20	9.20	9.20
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XXX -DOCO					
Gross Loan- Opening	626.00	626.00	626.00	626.00	626.00
Cumulative repayments of Loans upto previous year	573.83	626.00	626.00	626.00	626.00
Net loan-Opening	52.17	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	52.17	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	26.09	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.80	8.80	8.80	8.80	8.80
Interest on loan	2.2959	0.00	0.00	0.00	0.00

BOND XXXI -DOCO					
Gross Loan- Opening	869.00	869.00	869.00	869.00	869.00
Cumulative repayments of Loans upto previous year	796.58	869.00	869.00	869.00	869.00
Net loan-Opening	72.42	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	72.42	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	36.21	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.90	8.90	8.90	8.90	8.90
Interest on loan	3.2227	0.00	0.00	0.00	0.00

BOND XXXIII -DOCO	8				
Gross Loan- Opening	139.00	139.00	139.00	139.00	139.00
Cumulative repayments of Loans upto previous year	115.83	127.42	139.00	139.00	139.00
Net loan-Opening	23.17	11.58	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	11.58	11.58	0.00	0.00	0.00
Net Loan-Closing	11.59	0.00	0.00	0.00	0.00
Average Net Loan	17.38	5.79	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.64	8.64	8.64	8.64	8.64
Interest on loan	1.5016	0.5003	0.00	0.00	0.00

BOND-XXXIV -ADDCAP FOR 2011-2012					
Gross Loan- Opening	162.11	162.11	162.11	162.11	162.11
Cumulative repayments of Loans upto previous year	135.09	148.60	162.11	162.11	162.11
Net loan-Opening	27.02	13.51	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	13.51	13.51	0.00	0.00	0.00
Net Loan-Closing	13.51	0.00	0.00	0.00	0.00
Average Net Loan	20.27	6.76	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.84	8.84	8.84	8.84	8.84
Interest on loan	1.7919	0.5976	0.00	0.00	0.00

BOND-XXXIV -DOCO					
Gross Loan- Opening	194.13	194.13	194.13	194.13	194.13
Cumulative repayments of Loans upto previous year	161.78	177.95	194.13	194.13	194.13
Net loan-Opening	32.35	16.18	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	16.18	16.18	0.00	0.00	0.00
Net Loan-Closing	16.17	0.00	0.00	0.00	0.00
Average Net Loan	24.26	8.09	0.00	0.00	0.00

Rate of Interest on Loan on Annual Basis	8.84	8.84	8.84	8.84	8.84	
Interest on loan	2.1446	0.7152	0.00	0.00	0.00	

BOND XXXVI -ADDCAP FOR 2011-2012					
Gross Loan- Opening	60.00	60.00	60.00	60.00	60.00
Cumulative repayments of Loans upto previous year	32.00	36.00	40.00	44.00	48.00
Net loan-Opening	28.00	24.00	20.00	16.00	12.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	4.00	4.00	4.00	4.00	4.00
Net Loan-Closing	24.00	20.00	16.00	12.00	8.00
Average Net Loan	26.00	22.00	18.00	14.00	10.00
Rate of Interest on Loan on Annual Basis	9.35	9.35	9.35	9.35	9.35
Interest on loan	2.431	2.057	1.683	1.309	0.935

BOND XXXVII -ADDCAP FOR 2011-2012					
Gross Loan- Opening	135.12	135.12	135.12	135.12	135.12
Cumulative repayments of Loans upto previous year	101.34	112.60	123.86	135.12	135.12
Net loan-Opening	33.78	22.52	11.26	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	11.26	11.26	11.26	0.00	0.00
Net Loan-Closing	22.52	11.26	0.00	0.00	0.00
Average Net Loan	28.15	16.89	5.63	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.25	9.25	9.25	9.25	9.25
Interest on loan	2.6039	1.5623	0.5208	0.00	0.00

SBI (2014-15) -ADDCAP FOR 2014-15

Gross Loan- Opening	4.22	4.22	4.22	4.22	4.22
Cumulative repayments of Loans upto previous year	2.11	2.53	2.95	3.38	3.80
Net loan-Opening	2.11	1.69	1.27	0.84	0.42
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.42	0.42	0.42	0.42	0.42
Net Loan-Closing	1.69	1.27	0.85	0.42	0.00
Average Net Loan	1.90	1.48	1.06	0.63	0.21
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.1558	0.1214	0.0869	0.0517	0.0172

BOND XLVII -ADDCAP FOR 2014-15					
Gross Loan- Opening	4.10	4.10	4.10	4.10	4.10
Cumulative repayments of Loans upto previous year	2.05	2.39	2.73	3.08	3.42
Net loan-Opening	2.05	1.71	1.37	1.02	0.68
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.34	0.34	0.34	0.34	0.34
Net Loan-Closing	1.71	1.37	1.03	0.68	0.34
Average Net Loan	1.88	1.54	1.20	0.85	0.51
Rate of Interest on Loan on Annual Basis	8.93	8.93	8.93	8.93	8.93
Interest on loan	0.1679	0.1375	0.1072	0.0759	0.0455

BOND XLVIII -ADDCAP FOR 2014-15					
Gross Loan-Opening	0.28	0.28	0.28	0.28	0.28
Cumulative repayments of Loans upto previous year	0.14	0.21	0.21	0.21	0.21
Net loan-Opening	0.14	0.07	0.07	0.07	0.07
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00

Less: Repayment(s) of loan during the year	0.07	0.00	0.00	0.00	0.00
Net Loan-Closing	0.07	0.07	0.07	0.07	0.07
Average Net Loan	0.11	0.07	0.07	0.07	0.07
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	0.009	0.0057	0.0057	0.0057	0.0057

## Summary

Gross Loan- Opening	13,078.96	13,078.96	13,078.96	13,078.96	13,078.96
Cumulative repayments of Loans upto previous year	12,805.75	12,987.70	13,044.99	13,061.03	13,065.79
Net loan-Opening	273.21	91.26	33.97	17.93	13.17
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	181.95	57.29	16.02	4.76	4.76
Net Loan-Closing	91.26	33.97	17.95	13.17	8.41
Average Net Loan	182.25	62.62	25.96	15.55	10.79
Rate of Interest on Loan on Annual Basis	8.9571	9.0977	9.2589	9.2752	9.2994
Interest on loan	16.3243	5.697	2.4036	1.4423	1.0034

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

Name of the Transmission Licensee Power Grid Corporation of India Limited									
Project Koldam Hydro-electric Project - Associated Transmission System									
Element Description									
Region	Northern Region		DOCO Date	Apr 1, 2011					

(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	13,078.96	13,078.96	13,078.96	13,078.96	13,078.96
Cumulative repayments of Normative loan upto previous year	12,979.71	13,078.96	13,078.96	13,078.96	13,078.96
Net normative loan-Opening	99.25	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	99.25	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	49.63	0.00	0.00	0.00	0.00
Weighted Average Rate of interest on actual loan	8.9571	9.0977	9.2589	9.2752	9.2994
Interest on normative loan	4.45	0.00	0.00	0.00	0.00
Pro rata interest on normative loan	4.45	0.00	0.00	0.00	0.00

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

Form No. - 10

Name of the 1	Fransmission Licensee	Power Grid Corporation of India Limited							
Project	Koldam Hydro-electric Project - Associated Transmission System								
Element Description	Combined Assets Koldam - Nalagarh 400 KV D/C (Qurd) Line alongwith bays at Nalagarh S/s (Part of Powergrid portion) & 400 KV lin								
Region	Northern Region	DOCO Date Apr 1, 2011							

(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	17,271.66	0.00	17,271.66	17,271.66	5.28	169.86
Sub Station	1,161.21	0.00	1,161.21	1,161.21	5.28	11.41
Comm. Sys. excluding Fiber Optic	251.36	0.00	251.36	251.36	15.00	1.39
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	18,684.23	0.00	18,684.23	18,684.23	0.00	182.66
Weighted Average Rate of Depreciation(%)					0.977616	

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	17,271.66	0.00	17,271.66	17,271.66	5.28	169.86
Sub Station	1,161.21	0.00	1,161.21	1,161.21	5.28	11.41
Comm. Sys. excluding Fiber Optic	251.36	0.00	251.36	251.36	15.00	1.39
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	18,684.23	0.00	18,684.23	18,684.23	0.00	182.66
Weighted Average Rate of Depreciation(%)					0.977616	

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	17,271.66	0.00	17,271.66	17,271.66	5.28	169.86
Sub Station	1,161.21	0.00	1,161.21	1,161.21	5.28	11.41
Comm. Sys. excluding Fiber Optic	251.36	0.00	251.36	251.36	15.00	1.39
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	ọ.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	18,684.23	0.00	18,684.23	18,684.23	0.00	182.66
Weighted Average Rate of Depreciation(%)					0.977616	

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	17,271.66	0.00	17,271.66	17,271.66	5.28	169.87
Sub Station	1,161.21	0.00	1,161.21	1,161.21	5.28	11.42
Comm. Sys. excluding Fiber Optic	251.36	0.00	251.36	251.36	15.00	1.39
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	18,684.23	0.00	18,684.23	18,684.23	0.00	182.68
Weighted Average Rate of Depreciation(%)					0.977723	

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	17,271.66	0.00	17,271.66	17,271.66	5.28	169.86
Sub Station	1,161.21	0.00	1,161.21	1,161.21	5.28	11.41
Comm. Sys. excluding Fiber Optic	251.36	0.00	251.36	251.36	15.00	1.39
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	18,684.23	0.09	18,684.23	18,684.23	0.00	182.66

Page 3 of 4

0256008 : Combined Assets Koldam - Nalagath 400 KV D/C (Quro, Line alongwith bases Valagath S/s (Part of Powergrid portion) & 400 KV lin

Weighted Average Rate of Depreciation(%)	0.977616	
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## **Statement of Depreciation**

Name of the T	Fransmission Licensee	Power Grid Corporation	on of India Limited	
Project	Koldam Hydro-electric F	Project - Associated Tra	ınsmission System	ו
Element Description	Combined Assets Kolda portion) & 400 KV lin	ım - Nalagarh 400 KV D	D/C (Qurd) Line ald	ongwith bays at Nalagarh S/s (Part of Powergrid
Region	Northern Region		DOCO Date	Apr 1, 2011

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
Life at the beginning of the year				•	
1.1 Weighted Average useful life of the Asset/ Project	34.00	34.00	34.00	34.00	34.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	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)	21.00	20.00	19.00	18.00	17.00
Capital Base					
1.4 Opening capital cost	18,684.23	18,684.23	18,684.23	18,684.23	18,684.23
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	18,684.23	18,684.23	18,684.23	18,684.23	18,684.23
1.8 Average capital cost	18,684.23	18,684.23	18,684.23	18,684.23	18,684.23
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	18,684.23	18,684.23	18,684.23	18,684.23	18,684.23
1.12 Depreciable Value(1.10+90% of 1.11)	16,815.80	16,815.80	16,815.80	16,815.80	16,815.80
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	0.977616	0.977616	0.977616	0.977723	0.977616
			1.		

1.14 Depreciation(for the period)	182.66	182.66	182.66	182.68	182.66
1.15 Depreciation(Annualised)	182.66	182.66	182.66	182.68	182.66
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	12,979.71	13,162.37	13,345.03	13,527.69	13,710.37
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	13,162.37	13,345.03	13,527.69	13,710.37	13,893.03

Name of the	Transmission Licensee	Power Grid Corporation of India Lim	nited
Project	Koldam Hydro-electric Pr	oject - Associated Transmission Syst	tem
Element Description	Combined Assets Koldan portion) & 400 KV lin	ı - Nalagarh 400 KV D/C (Qurd) Line	alongwith bays at Nalagarh S/s (Part of Powergrid
Region	Northern Region	DOCO Date	Apr 1, 2011

(Amount in Rs. Lakh)

2024-25	2025-26	2026-27	2027-28	2028-29
365.00	365.00	365.00	366.00	365.00
365.00	365.00	365.00	366.00	365.00
14.83	15.61	16.43	17.30	18.20
26.70	28.10	29.57	31.14	32.76
178.03	178.67	179.94	180.77	182.67
219.56	222.38	225.94	229.21	233.63
11.90	11.90	11.90	11.90	11.90
26.13	26.46	26.89	27.28	27.80
26.13	26.46	26.89	27.28	27.80
	365.00 365.00 14.83 26.70 178.03 219.56 11.90 26.13	365.00     365.00       365.00     365.00       14.83     15.61       26.70     28.10       178.03     178.67       219.56     222.38       11.90     11.90       26.13     26.46	365.00       365.00       365.00         365.00       365.00       365.00         14.83       15.61       16.43         26.70       28.10       29.57         178.03       178.67       179.94         219.56       222.38       225.94         11.90       11.90       11.90         26.13       26.46       26.89	365.00       365.00       366.00         365.00       365.00       366.00         14.83       15.61       16.43       17.30         26.70       28.10       29.57       31.14         178.03       178.67       179.94       180.77         219.56       222.38       225.94       229.21         11.90       11.90       11.90       11.90         26.13       26.46       26.89       27.28

	Summary of issue involved in the	PART-III petition FORM- 15
	ne of the Petitioner	Power Grid Corporation of India Ltd
2. Peti	tion Category	Transmission
3. Tari	iff Period	2024-29
4. Nar	ne of the Project	
- T		Transmission System associated with Koldam Hydro-electric Project
). Inve	estment Approval date	
5. SCC	DD of the Project	
7. Actı	aal COD of the project	01.04.2011
3. Whe	ether entire scope is covered in the present petition.	Yes
	of Assets covered in instant petition	1
0. No	of Assets having time over run	
	imated Project Cost as per IA	Rs.199.33 Ct. 62, 96
2. Is	there any REC? If so, provide the date	Ves
l3. Rev	vised Estimated Project Cost (if any)	4
4. Co	mpletion cost for all the assets covered in the instant petition.	Rs.186.84 Crore
5. No	of Assets covered in instant petition and having cost overrun.	NIL
16	Prayer in brief	
17	Key details and any Specific issue involved:  1) There is No add-cap in 2019-24 and 2024-29	
18	Respondents	
	Name of Respondents	T1
	AJMER VIDYUT VITRAN NIGAM LTD	
	2 JAIPUR VIDYUT VITRAN NIGAM LTD	
	3 JODHPUR VIDYUT VITRAN NIGAM LTD	
	4 HIMACHAL PRADESH STATE ELECTRICITY 1	BOARD LTD
	5 PUNJAB STATE POWER CORPORATION LIMI 6 HARVANA POWER PURCHASE CENTRE	TED
	I ERTIFICITION ERTORCHASE CENTRE	
	POWER DEVELOPMENT DEPTT  11TTAR PRADESH POWER CORPORATION LT	
	OTTAKTRADESITTOWER CORPORATION LT	D.
	9 BSES YAMUNA POWER Ltd	
	10 BSES RAJDHANI POWER Ltd	
	TATALLO WERE DEFINED BUILDING HOLVE ID	
	12 CHANDIGARH ADMINISTRATION	
	13 UTTARAKHAND POWER CORPORATION LTD	)
	14 NORTH CENTRAL RAILWAY	
	15 NEW DELHI MUNICIPAL COUNCIL	



		Str	mmary of Ca	Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL the assets covered in the proceed to the process to the proc	Tixed Cost (A	VFC) Claimed	d for ALL th	e assets cove	red in the r	Procent notit	ion		
Name of	Name of the Petitioner		,	4	Power grid Co	Power grid Corporation of India Ltd	dia Ltd			The state of the s			
Tariff Period	iod				2024-29								
Name of	Name of the Transmission Project	Project			System Streng	System Strengthening in Northern Region Grid for Karcham Wangtoo HEP	them Region G	rid for Karchan	1 Wangtoo HE	<u>ا</u>			
COD of t	COD of the Project (if entire scope of project is completed)	e scope of pr	oject is comp	leted)	01.04.2011								
													Rupees in lakh
A) Summ	A) Summary of Capital Cost as on COD and Additional	st as on COL	and Additic	onal Capital Expenditure claimed for all the assets Covered in the instant petition.	are claimed	for all the ass	sets Covered	in the insta	nt petition.				
				i) Apportioned Approved Cost	proved Cost								
								ii) Summ	ary of Actua	al / Projecte	ii) Summary of Actual / Projected Capital Cost	set	
		COD	Cut-off										
S. No.	Asset No.		Date	As per Investment approval	As per RCE	As on COD	2024-25	2025-26	2026-27	2027-28	2028-29	Capital Cost as on 31.03.2029	Capital Cost Capital Cost as as on on cutoff date 31.03.2029
		1	2	3	4	ī	9	7	∞	6	10	11=(5+6+7+8+9+10)	12
1	Asset-1	01.04.2011	31.03.2014	19933	7	18684.23	1					18684.23	18684.23
	Total Capital Cost Claimed	lost Claimed		19933		18684.23		0	0	0	0	18684.23	18684.23
B) Summ	B) Summary of Annual Fixed Cost (AFC) claimed for all	ed Cost (AFC	C) claimed fo	r all the assets covered in the instant petition.	in the insta	int petition.							
S. No.	Asset No.			Asset Name	Asset Name and its location	tion			2024-25	2025-26	2026-27	2027-28	2028-29
1	Asset-1	Combined As station and As	sset II: 400 kV l	Combined Asset comprising of Asset I: Koldam Nalagarh 400 kV D/C (Quad) line along with bays at Nalagarh Substation and Asset II: 400 kV line bays at Ludhiana Sub-station.	h 400 kV D/C ( ation.	Quad) line alon	ig with bays at 1	Nalagarh Sub-	1444.02	1449.25	1459.49	1470.31	1481.67
			Tota	Total AFC for all the Assets	ts.				1444.02	1449.25	1459.49	1470.31	1481.67
Note: 1) T	he purpose of this	form is to st	ummarise the	Note: 1) The purpose of this form is to summarise the Capital cost & AFC claimed for all the assets covered in the instant petition.	aimed for all	the assets co	wered in the	instant petiti	ion.				



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

### PART-III

Form No.	Title of Tariff Filing Forms (Transmission& Communication System)	Tick
FORM-1	Summary of Tariff	1
FORM- 1A	Summary of Asset level cost	NA
FORM-2	Details of Transmission Lines and Substations and Communication	
	System covered in the project scope and O&M for instant asset	1
FORM-3	Normative parameters considered for tariff computations	1
	Abstract of existing transmission assets/elements under project,	NA
FORM- 4	Determination of Effective COD and Weighted Average Life for single AFC for the project as whole.	
FORM- 4A	Statement of Capital cost	NA
FORM- 4B	Statement of Capital Works in Progress	NA
FORM- 4C	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New Project/Element	NA
FORM-5	Element wise Break-up of Project/Asset/Element Cost for	NA
	Transmission System or Communication System	
FORM-5A	Break-up of Construction/Supply/Service packages	NA
FORM-5B	Details of all the assets covered in the project	NA
FORM- 6	Actual Cash Expenditure and Financial Package up to COD	NA
FORM- 7	Statement of Additional Capitalisation after COD	NA
FORM-7A	Financing of Additional Capitalisation	NA
FORM-7B	Statement of Additional Capitalisation during five year before the end	NA
	of the useful life of the project.	
FORM-8	Calculation of Return on Equity	1
FORM-8A	Details of Foreign Equity	NA
FORM-9	Details of Allocation of corporate loans to various transmission elements	NA
FORM-9A	Details of Project Specific Loans	NA
FORM-9B	Details of Foreign loans	NA
FORM-9C	Calculation of Weighted Average Rate of Interest on Actual Loans	NA
FORM-9D	Loans in Foreign Currency	NA
FORM-9E	Calculation of Interest on Normative Loan	1
FORM-10	Calculation of Depreciation Rate on original project cost	1
FORM-10A	Statement of Depreciation	✓
FORM-10B	Statement of De-capitalisation	NA
FORM-11	Calculation of Interest on Working Capital	NA
FORM-12	Details of time over run	NA
FORM-12A	Incidental Expenditure during Construction	NA
FORM- 12B	Calculation of IDC & Financing Charges	NA
FORM- 13	Details of Initial spares	NA
FORM-14	Non-Tariff Income	NA
FORM- 15	Summary of issue involved in the petition	<b>V</b>
FORM A	Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL	<b>V</b>



Other Informations, No.	Information/Document	Ticl
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC)	NA
2	Region wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & Annexure for the new Transmission  System & Communication System for the relevant years.	NA
3	Copies of relevant loan Agreements	NA
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	Yes
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	NA
6	Copies of the BPTA/TSA/PPA with the beneficiaries, if any	NA
7	Detailed note giving reasons of cost and time over run, if applicable. List of supporting documents to be submitted:  a. Detailed Project Report  b. CPM Analysis  c. PERT Chart and Bar Chart  d. Justification for cost and time Overrun	Yes
8	Transmission Licensee shall submit copy of Cost Audit Report along with cost accounting records, cost details, statements, schedules etc. for the transmission system as submitted to the Govt. of India for first two years i.e. 2019-20 and 2020-21 at the time of midterm 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.	NA
9.	BBMB is maintaining the records as per the relevant applicable Acts. Formats specified herein may not be suitable to the available information with BBMB. BBMB may modify formats suitably as per available information to them for submission of required information for tariff purpose.	NA
10.	Any other relevant information, (Please specify)	NA

Note 1: Electronic copy of the petition (in words format) and detailed calculation as per these formats (in excel format) and any other information submitted has to be uploaded in the e-filing website and shall also be furnished in pen drive/flash drive.

