

BEFORE

THE CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

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

IN THE MATTER OF: -

**Subject matter:** Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for **Provision of Spare ICTs and Reactors for Southern Region forming part of Provision of Spare ICTs and Reactors for Eastern, Northern, Southern and Western Region** under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

**Power Grid Corporation of India Ltd.**

---PETITIONER

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

**Tamil Nadu Generation and Distribution Corporation Ltd**

--- RESPONDENTS

NPKRR Maaligai, 800, Anna Salai,  
Chennai – 600 002  
Represented by its Chairman & Managing Director  
**And others**

**Place:Gurgaon**

**Date: 27.07.2024**

**Petitioner**

  
**(Mohd Mohsin)**

**Chief General Manager (Commercial/RC)**



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**FILED BY**

**POWER GRID CORPORATION OF INDIA LTD.**

**GURGAON**

**REPRESENTED BY**

**DATED: 27.07.2024**

*(Signature)*  
**(Mohd Mohsin)**

**Chief General Manager (Commercial/RC)**



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--- **PETITIONER**

**Tamil Nadu Generation and Distribution Corporation Ltd**

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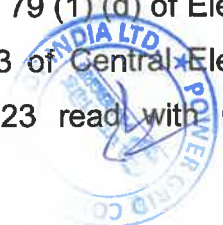
**And others**

----- **RESPONDENTS**

To  
The Secretary  
Central Electricity Regulatory Commission  
New Delhi 110001

Sir,

The present tariff Petition is filed under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central



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

**GURGAON**

**FILED BY**

**DATED:27.07.2024**

**POWER GRID CORPORATION OF INDIA LTD.**

**REPRESENTED BY**

  
**Mohd Mohsin**

**Chief General Manager (Commercial/RC)**



**BEFORE**  
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**IN THE MATTER OF:**

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Tamil Nadu Generation and Distribution Corporation Ltd

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Chennai – 600 002

Represented by its Chairman & Managing Director

**And others**

**MEMO OF PARTIES**

**Power Grid Corporation of India Ltd.**

--- PETITIONER

VERSUS

**Southern Region**



--- RESPONDENTS

1. Tamil Nadu Generation and Distribution Corporation Ltd  
NPKRR Maaligai, 800, Anna Salai,  
Chennai – 600 002  
Represented by its Chairman & Managing Director

2. Kerala State Electricity Board Ltd (KSEBL)  
Vaidyuthi Bhavanam  
Pattom, Thiruvananthapuram – 695 004  
Represented by its Chairman

3. Electricity Department  
Government of Goa  
Vidyuti Bhawan, Panaji, Goa 403001  
Represented by Chief Engineer ( Electrical)

4. Electricity Department  
Govt of Pondicherry,  
137, Netaji Subash Chandra Bose Salai  
Pondicherry - 605001  
Represented by its Chief Secretary

5. Eastern Power Distribution Company of Andhra Pradesh  
Limited (APEPDCL),  
APEPDCL, P&T Colony,  
Seethmmadhara, VISHAKHAPATNAM, Andhra Pradesh,  
Represented by its Chairman & Managing Director

6. Southern Power Distribution Company of Andhra Pradesh Ltd  
(APSPDCL)  
#19-13-65/A, Srinivasapuram, Tiruchanoor Road  
Tirupati – 517503, Andhra Pradesh  
Represented by Its Chairman & Managing Director

7. Andhra Pradesh Central Power Distribution Company Limited  
(APCPDCL)



Corporate Office, Beside Polytechnic College, ITI Road  
Vijayawada - 520 008, Krishna District, Andhra Pradesh  
Represented by Its Chairman & Managing Director

8.Southern Power Distribution Company of Telangana Limited  
(TSSPDCL)

6-1-50, Corporate Office, Mint Compound,  
HYDERABAD – 500 063, Telangana  
Represented by Its Chairman & Managing Director

9.Northern Power Distribution Company of Telangana Limited  
(TSNPDCL)

H.No 2-5-3 1/2, Vidyut Bhawan, Corporate Office,  
Nakkal Gutta, Hanamkonda, WARANGAL – 506 001, Telangana  
Represented by Its Chairman & Managing Director

10.Bangalore Electricity Supply Company Ltd., (BESCOM),  
Corporate Office, K.R.Circle  
BANGALORE – 560 001, Karanataka  
Represented by Its Managing Director

11.Gulbarga Electricity Supply Company Ltd., (GESCOM)  
Corporate Office, Station Main Road, Opp. Parivar Hotel,  
Gulbarga (Kalburgi), KARNATAKA - 585102  
Represented by Its Managing Director

12.Hubli Electricity Supply Company Ltd., (HESCOM)  
Navanagar, PB Road, HUBLI, Karnataka- 580025  
Represented by Its Managing Director

13.Mangalore Electricity Supply Company Ltd., (MESCOM)  
Corporate Office,1st Floor, MESCOM Bhavan,  
Kavoor Cross Road, Bejai, Mangalore – 575 004,Karnataka  
Represented by Its Managing Director





14. Chamundeswari Electricity Supply Corporation Ltd., (CESC)  
Corporate Office, #29, Vijayanagara 2nd Stage,  
Hinkal, Mysuru-570017, KARNATAKA  
Represented by Its Managing Director

**GURGAON**

**DATED: 27.07.2024**

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

  
**Mohd Mohsin**  
**Chief General Manager (Commercial/RC)**



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Tamil Nadu Generation and Distribution Corporation Ltd  
NPKRR Maaligai, 800, Anna Salai,  
Chennai – 600 002  
Represented by its Chairman & Managing Director

**--- RESPONDENT**

**MEMO OF APPEARANCE**

**POWER GRID CORPORATION OF INDIA LTD.**

**-- PETITIONER**

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



I, Mohd Mohsin, 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 27<sup>th</sup> day of July 2024.

**PETITIONER**

**POWER GRID CORPORATION OF INDIA LTD.**

**GURGAON**

**DATED:27.07.2024**

  
**Mohd Mohsin**  
**Chief General Manager (Commercial/RC)**



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Tamil Nadu Generation and Distribution Corporation Ltd

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Chennai – 600 002

Represented by its Chairman & Managing Director

**A. Executive Summary of the Petition:**

**(i) Brief Background of the Petitioner**

1. The Petitioner herein, Power Grid Corporation of India Ltd. (Hereinafter referred to as "**POWERGRID/Petitioner**") is a Government Company within the meaning of the Companies Act, 2013. POWERGRID is deemed transmission licensee in terms of Section 14 of the Electricity Act, 2003. POWERGRID by virtue of a transmission licensee is required to inter-alia build, maintain and operate an efficient, coordinated and economical interstate transmission system ("**ISTS**"). POWERGRID operates and



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

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

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

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

2. POWERGRID has filed the present petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for the following Assets which are implemented under "Provision of Spare ICTs and Reactors for Eastern, Northern, Southern and Western Region " for the following:

Asset No	Asset Name	DOCO	Remarks
Combined Asset	80MVAR Spare reactor at Gooty	01.01.2013	Effective DOCO w.e.f. 01.03.2013
	315MVA 400/220kV Spare Transformer at Hyderabad S/s	01.03.2013	

**(iv) Summary of Claims:**

3. POWERGRID is seeking truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for aforesaid transmission assets on capital cost comprising of capital cost admitted upto 31.03.2019 and additional capital expenditure during 2019-24 & 2024-29 in accordance with terms of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("Tariff Regulations, 2019") and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 ("Tariff Regulations, 2024").



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

Rs in lakhs

Asset No.	Approved Cost	Expenditure admitted Up to 31.03.2019	Expenditure during 2019-24 tariff block	Actual Cost as on 31.03.2024
			2019-24	
<b>Combined Asset</b>	1890.00	1584.60	No add cap	1584.60

Rs in lakhs

Asset No.	Approved Cost	Expenditure Up to 31.03.2024	Estimated expenditure during 2024-29 tariff block	Estimated completion Cost as on 31.03.2029
			2024-29	
<b>Combined Asset</b>	1890.00	1584.60	No add cap	1584.60

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

6. Details of tariff claimed are as under:

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

Rs in Lakhs

Name of the asset	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset	AFC approved	226.38	218.59	210.81	203.41	196.04
	Revised AFC based on true up	226.31	218.32	210.59	203.29	196.41

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	188.65	130.82	127.84	124.84	123.21



**B. Detailed Petition:**

**MOST RESPECTFULLY SHOWETH:**

**Issue wise submission(s)**

7. The Petitioner herein, Power Grid Corporation of India Ltd/ POWERGRID. is a Government Company within the meaning of the Companies Act, 1956. POWERGRID is a deemed transmission licensee under Section 14 of the Electricity Act 2003.
8. POWERGRID being transmission licensee is required to inter-alia build, maintain and operate an efficient, coordinated and economical interstate transmission system (ISTS). The tariff for the said transmission systems shall be determined by the Hon'ble Central Commission in accordance with the Tariff Regulations, 2019 and 2024.
9. That the subject project/petition covers approval of transmission tariff for following Assets:

Asset No	Asset Name	DOCO	Effective DOCO	Remarks
Combined Asset	80MVAR Spare reactor at Gooty	01.01.2013	01.03.2013	Earlier covered under petition no. 289/TT/2019  (Now, covered under instant petition)
	315MVA 400/220kV Spare Transformer at Hyderabad S/s	01.03.2013		

**10. Cost detail:**

The capital cost of Rs. 1584.60 Lakhs for subject Asset has been admitted by Hon'ble commission vide order dated 28.02.2022 in petition no. 289/TT/2019. Copy of order is enclosed as **Encl-1**. In the current petition, no additional capital expenditure was incurred during the 2019-24 tariff block, and no additional capital expenditures are proposed during the 2024-29 tariff block.

**11. Transmission tariff:**





This truing up petition is being filed as per regulation 13 of Tariff Regulation 2019-24, given as here under:

Regulation 13 of Tariff Regulation 2019-24:

**Quote**

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

**Unquote**

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

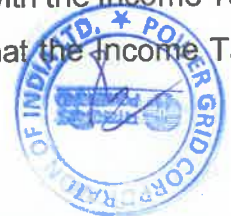
Regulation 31 (3) of the tariff Regulation 2019-24:

**Quote**

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

**Unquote**

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





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

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

# Based on the applicable rate of MAT @ 15.5 %, Surcharge @ 12% & Cess @ 4%

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



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

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

While filing Tariff petition for 2019-24 period, the petitioner had prayed for allowing the floating rate of Interest on loan adjustments. As per Hon'ble Commission order dated 28.02.2022 in petition no. 289/TT/2019, it has been stated that the weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019 and accordingly, the floating rate of interest on actual, applicable from time to time, if any, during 2019-24 tariff shall be considered at the time of true up or next revision of tariff.

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

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

Rs in Lakh

Project		2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset	AFC approved	226.38	218.59	210.81	203.41	196.04
	Revised AFC based on truing up	226.31	218.32	210.59	203.29	196.41

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

That in the subject petition, details are provided in various Tariff Forms with respect to Capital Cost as per books / Gross Block amount as per Books. It is submitted that



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

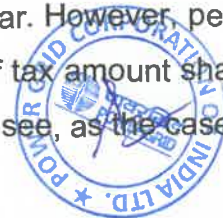
13. The tariff for 2024-29 tariff block is summarized below:

Rs in Lakh

Project		2024-25	2025-26	2026-27	2027-28	2028-29
Combined Asset	AFC	188.65	130.82	127.84	124.84	123.21

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

14. The Combined Asset completes 12 years of life as on 31.3.2025 and thus depreciation till 2024-25 has been calculated based on the straight-line method and at rate specified in Appendix-I and as per clause 33 (5) of the CERC Tariff regulations 2019. Since the year 2025-26, depreciation has been calculated based on remaining depreciable value to be recovered in the balance useful life. The details have been computed and are provided in Form- 10 A.
15. That, it is submitted that the petitioner is currently liable to pay income tax at MAT rate specified in Income-Tax, 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 8.4 above is exclusive of GST. Further, if GST is levied at any rate and at any point of time in future on Charges of Transmission of Electricity, the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged & billed separately by the petitioner. Further additional taxes, if any, are to be paid by the petitioner on account of demand from Govt. / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.
17. In the tariff calculation for 2019-24 period, Interest on Loan has been calculated on the basis of actual rate of interest of various loans deployed for each year. In the tariff calculation for 2024-29 period, Interest on Loan has been calculated on the basis of interest rates prevailing as on 01.04.2024 for respective loans. The change in Interest rate due to floating rate of interest applicable, if any, for the project needs to be claimed / adjusted over the tariff block of 05 years directly from / with the beneficiaries.

For the purpose of the supporting documents for rate of interest, a compendium of floating rate of interest of various loans during the tariff period 2019-24 will be submitted shortly with a truing up petition. These documents/details will also be made available on our website [www.powergrid.in](http://www.powergrid.in).

18. Nil O&M have been claimed in the transmission charges at para-12 & 13 as the asset is spare in nature.



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:**

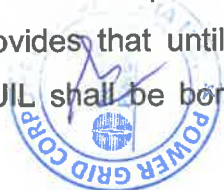
In this regard, it is submitted that a separate petition shall be filed before Hon'ble Commission for claiming the overall Insurance Expenses and consequential Interest on Working Capital (IOWC) on the same considering actual Insurance Expense incurred by the Petitioner for the F/Y 2023-24 after escalating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

**Capital Spares:**

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

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

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





POWERGRID which shall be recovered by POWERGRID as additional O&M expenses through a separate petition.

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

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

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 Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 & 2020 or as amended from time to time.



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

24. In the circumstances mentioned above it will be just and proper that the transmission tariff for the asset covered under this petition be allowed to be charged from the beneficiaries on the basis set out above. **The Petitioner submits that Encl.-1 to Encl.-4 may please be treated as integral part of this petition.**

#### A. PRAYER

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

- a) Approve the trued up Transmission Tariff for 2019-24 block and transmission tariff for 2024-29 block for the assets covered under this petition, as per para 12 and 13 above.
- b) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 and Tariff regulations 2024 as per para 12 and 13 above for respective block.
- c) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 94 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, and other expenditure ( if any) in relation to the filing of petition.
- d) Allow the petitioner to bill and recover Licensee fee and RLDC fees & charges, separately from the respondents in terms of Regulation 94 (3) and (4) Central



Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

- e) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2024-29 period, if any, from the respondents.
- f) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 19 above.
- g) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall insurance expenses and consequential IOWC on that insurance expenses as mentioned at para 19 above.
- h) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall capital spares 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.

**GURGAON**

**DATED:27.07.2024**

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

**REPRESENTED BY**

  
**Mohd Mohsin**

**Chief General Manager (Commercial/RC)**



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

**PETITION NO.: .....**

**IN THE MATTER OF:**

**Subject matter:** Petition for truing up of Transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for **Provision of Spare ICTs and Reactors for Southern Region forming part of Provision of Spare ICTs and Reactors for Eastern, Northern, Southern and Western Region** under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission. (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2019 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024.

**Power Grid Corporation of India Ltd.**

**---PETITIONER**

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

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

**Tamil Nadu Generation and Distribution Corporation Ltd**

**--- RESPONDENT**

NPKRR Maaligai, 800, Anna Salai,  
Chennai – 600 002

Represented by its Chairman & Managing Director

**And others**

**AFFIDAVIT VERIFYING THE PETITION**

I, Mohd Mohsin, S/o late Shri Akhtar Hasan, working as Chief General Manager (Commercial/RC) in the Powergrid Corporation of India Ltd., having its registered Office at B-9, Institutional Area, Katwaria Sarai, New Delhi-110 016, do hereby solemnly affirm and state as under: -



1. That the deponent is the Chief General Manager of Petitioner and is well conversant with the facts and the circumstances of the case and therefore competent to swear this affidavit.
2. That the accompanying Petition under Section 62 of the Electricity Act, 2003, has been filed by my authorised representative/nominated counsel under my instruction and the contents of the same are true and correct to the best of my knowledge and belief.
3. That the contents of Para 01 to 24 of the facts as mentioned in the Petition are true and correct based on the 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



#### VERIFICATION

Solemnly affirmed at Gurgaon on this 27<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.



ATTESTED  
MAHENDER S. PUNIA  
ADVOCATE & NOTARY  
Distt. Gurugram (Haryana)



**पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड**  
**केन्द्रीय वाणिज्यिक विभाग**


**Ref: CC/Commercial/2022**

**Date:-13.12.2022**

**LETTER OF AUTHORIZATION**

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

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

  
13/12/22  
**Mukesh Khanna**

**ED (Commercial & RC)**



**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 289/TT/2019**

**Coram:**

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

**Date of Order: 28.02.2022**

**In the matter of:**

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of Provision of Spare ICTs and Reactors for Southern Region forming part of Provision of Spare ICTs and Reactors for Eastern, Northern, Southern and Western Region.

**And in the matter of:**

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

.....Petitioner

**Versus**

1. Karnataka Power Transmission Corporation Limited,  
Kaveri Bhavan,  
Bangalore-560009.
2. Transmission Corporation of Andhra Pradesh Limited,  
Vidyut Soudha,  
Hyderabad-500082.
3. Kerala State Electricity Board,  
Vaidyuthi Bhavanam, Pattom,  
Thiruvananthapuram-695004.
4. Tamil Nadu Generation and Distribution Corporation Limited,  
(Formerly Tamil Nadu Electricity Board-TNEB),  
NPKRR Maaligai, 800, Anna Salai,  
Chennai-600002.

**ATTESTED TRUE COPY**  
Page no. 29-61  
Authorised Signatory  
Power Grid Corporation of India Ltd.  
Plot No. 2, Sector-29, Gurgaon-122001 (HARYANA)



5. Electricity Department,  
Government of Pondicherry,  
Pondicherry-605001.
6. Eastern Power Distribution Company of Andhra Pradesh Limited,  
P&T Colony, Seethmadhara, Vishakhapatnam,  
Andhra Pradesh.
7. Southern Power Distribution Company of Andhra Pradesh Limited,  
Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road,  
Kesavayana Gunta, Tirupati,  
Chittoor District, Andhra Pradesh-517501.
8. Central Power Distribution Company of Andhra Pradesh Limited,  
Corporate Office, Mint Compound,  
Hyderabad-500063 (Telangana).
9. Northern Power Distribution Company of Andhra Pradesh Limited,  
Opposite NIT Petrol Pump, Chaitanyapuri, Kazipet,  
Warangal-506004 (Telangana).
10. Bangalore Electricity Supply Company Limited,  
Corporate Office, K. R. Circle,  
Bangalore-560001 (Karnataka).
11. Gulbarga Electricity Supply Company Limited,  
Station Main Road, Gulbarga,  
Karnataka.
12. Hubli Electricity Supply Company Limited,  
Navanagar, PB Road, Hubli,  
Karnataka.
13. MESCOM Corporate Office,  
Paradigm Plaza, AB Shetty Circle,  
Mangalore-575001 (Karnataka).
14. Chamundeswari Electricity Supply Corporation Limited,  
# 927, L J Avenue, Ground Floor, New Kantharaj URS Road,  
Saraswatipuram,  
Mysore-570009 (Karnataka).
15. Electricity Department,  
Government of Goa,  
Vidyuti Bhawan,  
Panaji, Goa-403001.
16. Transmission Corporation of Telangana Limited,  
Vidhyut Sudha, Khairatabad,  
Hyderabad-500082.



.....Respondent(s)



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

**For Respondents :** None

### ORDER

The Petitioner, Power Grid Corporation of India Limited, has filed the instant petition for truing-up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations"); and for determination of transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the following transmission assets covered under Provision of Spare ICTs and Reactors for Southern Region (hereinafter referred to as "the transmission project") forming part of Provision of Spare ICTs and Reactors for Eastern, Northern, Southern and Western Region Provision of Spare ICTs and Reactors for Southern Region (hereinafter referred to as "the transmission scheme"):

**Asset-I:** 400 kV, 80 MVAR Spare Reactor at Gooty Sub-station; and

**Asset-II:** 315 MVA, 400/220 kV 3-Phase Spare Transformer initially planned at Madurai Sub-station but later diverted to Hyderabad Sub-station.

(Hereinafter, Asset-I and Asset-II are collectively referred to as "the combined transmission assets").

2. The Petitioner has made the following prayers in this 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 5 and 6 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 the Commission as provided in Tariff Regulation 2014 and Tariff regulations 19 as per para 5 and 6 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 respondents 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 respondents.
- 6) Allow the Petitioner to file a separate petition before the Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 6.6 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 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 the Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice”

### 3. Backdrop of the case

- a) The Petitioner was entrusted with the implementation of the transmission project and proposal related thereto was approved by the Southern Region constituents during the 13<sup>th</sup> Southern Regional Power Committee held on 11.5.2010.
- b) Investment Approval (I.A.) for the transmission scheme was accorded by the Board of Directors of the Petitioner's company (in its 255<sup>th</sup> meeting held on 2.8.2011) vide Memorandum No. C/CP/Spare ICTs & Reactors dated 4.8.2011 at an estimated cost (based on 1<sup>st</sup> Quarter 2011 Price Level) as follows:





- i. Spare Transformers in Northern Region - ₹3843.00 lakh including IDC of ₹104.00 lakh;
  - ii. Spare Transformers and Reactor in Eastern Region - ₹7777.00 lakh including IDC of 210.00 lakh;
  - iii. Spare Transformer and Reactor in Southern Region - ₹1890.00 lakh including IDC of ₹51.00 lakh; and
  - iv. Spare Transformers and Reactors in Western Region - ₹6409.00 lakh including IDC of ₹173.00 lakh.
- c) As per I.A., the broad scope of works covered under the transmission scheme was as follows:

**Part-I: Spare Transformers in Northern Region**

Number of Spare Transformers	Proposed Locations
3 numbers 315 MVA, 400/220/33 kV ICTs	Lucknow S/S (U.P.) Bhiwadi (Rajasthan) Hissar (Haryana)

**Part-II: Spare Transformers/ Reactors in Eastern Region**

Number of Spare Transformers/ Reactors	Proposed Locations
4 numbers 315 MVA, 400/220/33 kV ICTs	Biharshariff (Bihar), Durgapur (WB), Jamshedpur (Jharkhand), Rourkela (Orissa)
2 numbers 160 MVA, 220/132 kV ICT	Baripada (Orissa), Siliguri (WB)
1 number 50 MVA, 132/66 kV ICT	Gangtok (Sikkim)
1 number 80 MVAR Shunt Reactor	Rourkela (Orissa)

**Part-III: Spare Transformers/ Reactors in Southern Region**

Numbers of Spare Transformers/ Reactors	Proposed Locations
1 number 315 MVA, 400/220/33 kV ICTs	Madurai (Tamil Nadu)
1 number 80 MVAR Shunt Reactor	Gooty (A.P.)

**Part-IV: Spare Transformers/ Reactors in Western Region**

Numbers of Spare Transformers/ Reactors	Proposed Locations
4 numbers 315 MVA, 400/220/33 kV ICTs	Dehgam (Gujarat) Jabalpur (M.P.) Pune (Maharashtra) Raipur (Chhattisgarh)
1 number 80 MVAR Shunt Reactor	Wardha (Maharashtra)
1 number 1245 MVAR Shunt Reactor	Itarsi (M.P.)

- d) Petition No. 47/TT/2013 was filed by the Petitioner seeking approval of the transmission tariff of 315 MVA, 400/220/33 KV 3-phase Spare Transformer at Madurai SS\* (anticipated COD: 1.2.2013) and 400 kV, 80 MVAR Spare reactor at Gooty SS\* (COD: 1.1.2013) from their anticipated COD/ COD to 31.3.2014.



Provisional tariff for the same was allowed by the Commission vide order dated 18.3.2013 in Petition No. 47/TT/2013 (Docket No. 24/TT/2013).

(\* Assets names are as filed by the Petitioner vide affidavit dated 16.1.2013 in Petition No. 47/TT/2013)

e) The Petitioner vide affidavit dated 1.7.2015 had inter-changed the asset description *vis-à-vis* that in Petition No. 47/TT/2013 as follows:

Assets names as filed vide affidavit dated 16.1.2013 in Petition No. 47/TT/2013	Assets description changed vide affidavit dated 1.7.2015 in Petition No. 47/TT/2013
400 kV, 80 MVAR Spare reactor at Gooty SS	<b>Asset-I:</b> 400 kV, 80 MVAR Spare Reactor at Gooty Sub-station
315 MVA, 400/220/33 KV 3-phase Spare Transformer at Madurai SS	<b>Asset-II:</b> 315 MVA, 400/220/33 kV 3-Phase Spare Transformer initially planned at Madurai Sub-station but later diverted to Hyderabad Sub-station

f) The transmission tariff of Asset-I and Asset-II from their respective COD of 1.1.2013 and 1.3.2013 to 31.3.2014 was allowed vide order dated 21.12.2015 in Petition No. 47/TT/2013. Vide this order the time over-run of 2 months in the commissioning of Asset-II was condoned. There was no time over-run in the commissioning of Asset-I.

g) The transmission tariff of Asset-I and Asset-II for the 2009-14 period was trued-up vide order dated 21.10.2016 in Petition No. 145/TT/2016 and vide this order, one combined tariff for the 2014-19 tariff period was also approved for the combined transmission assets.

h) The Petitioner vide affidavit dated 19.7.2021 has submitted that the scope of work covered under the transmission project is complete and is covered in this petition.

4. The Respondents are distribution licensees, transmission licensee, power utilities and power departments, which are procuring transmission services from the Petitioner, mainly beneficiaries of Southern Region.

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or objections have been received from



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the general public in response to the aforesaid notices published in the newspapers. None of the respondents have filed any reply in this matter.

6. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 10.8.2019 and the Petitioner affidavit dated 19.7.2021 filed in response to technical validation letter.

7. The hearing in this matter was held on 3.8.2021 through video conference and the order was reserved. Having heard the representatives of the Petitioner and after perusal of the materials on record, we proceed to dispose of the petition.

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

8. The details of the trued-up transmission charges as claimed by the Petitioner (vide affidavit dated 19.7.2021) for the combined transmission assets are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	83.67	83.67	83.67	83.67	83.67
Interest on Loan	88.57	80.75	72.96	65.03	57.46
Return on Equity	93.23	93.68	93.68	93.68	93.93
Interest on Working Capital	6.11	5.94	5.76	5.58	5.41
O&M Expenses	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>271.58</b>	<b>264.04</b>	<b>256.07</b>	<b>247.96</b>	<b>240.47</b>

9. The details of the trued-up Interest on Working Capital (IWC) as claimed by the Petitioner (vide affidavit dated 19.7.2021) for the combined transmission assets are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	45.26	44.01	42.68	41.33	40.08
Total Working Capital	45.26	44.01	42.68	41.33	40.08
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest on Working Capital</b>	<b>6.11</b>	<b>5.94</b>	<b>5.76</b>	<b>5.58</b>	<b>5.41</b>



### Capital Cost

10. The capital cost of the transmission project has been calculated in accordance with the Regulation 9(3) of the 2014 Tariff Regulations.

11. The Petitioner has submitted that final transmission tariff based on admitted capital cost of ₹1584.60 lakh as on 1.4.2014 as well as 31.3.2019 [in view of no Additional Capital Expenditure (ACE) during the 2014-19 period] for the combined transmission assets had been approved by the Commission vide order dated 21.10.2016 in Petition No. 145/TT/2016 for the 2014-19 tariff period. The said details as submitted are as follows:

(₹ in lakh)			
Approved Cost	Admitted Capital Cost as on 31.3.2014	ACE during 2014-19 period	Admitted Capital Cost as on 31.3.2019
1890.00	1584.60	0.00	1584.60

12. Based on the Auditor's Certificates (as submitted in Petition No. 145/TT/2016), the Petitioner has claimed ₹1584.60 as the capital cost as on 1.4.2014.

13. We have considered the submissions and claim of the Petitioner. The admitted capital cost of ₹1584.60 as on 31.3.2014 for the combined transmission assets has been considered for working out the true up tariff for the 2014-19 tariff period.

### ADDITIONAL CAPITAL EXPENDITURE

14. The Petitioner vide affidavit dated 19.7.2021 has submitted that no ACE was incurred during the 2014-19 period.

15. Therefore, the details of the capital cost considered for the true up of tariff for the 2014-19 tariff period are as follows:

(₹ in lakh)	
Capital Cost (as on 1.4.2014)	Capital Cost (as on 31.3.2019)
1584.60	1584.60



### Debt-Equity Ratio

16. As per Regulation 19(3) of the 2014 Tariff Regulations, the debt-equity ratio allowed by the Commission for determination of tariff for the period ending on 31.3.2014 shall be considered. Accordingly, the details of the debt-equity ratio as on 1.4.2014 and 31.3.2019 for the combined transmission assets are as follows:

Funding	(₹ in lakh)		(₹ in lakh)	
	Capital Cost (as on 1.4.2014) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2019) (₹ in lakh)	(in %)
Debt	1109.22	70.00	1109.22	70.00
Equity	475.38	30.00	475.38	30.00
<b>Total</b>	<b>1584.60</b>	<b>100.00</b>	<b>1584.60</b>	<b>100.00</b>

### Depreciation

17. The Petitioner vide affidavit dated 19.7.2021 has submitted that inadvertently the cumulative depreciation till 31.3.2014 has been considered as ₹90.64 lakh while filing this petition. Also, the tariff forms for the 2014-19 period have been revised considering cumulative depreciation till 31.3.2014 as allowed vide order dated 21.10.2016 in Petition No. 145/TT/2016.

18. We have considered the submissions of the Petitioner. The Gross Block during the 2014-19 period for the combined transmission assets has been depreciated at Weighted Average Rate of Depreciation (WAROD). WAROD at Annexure-I has been worked out after taking into account the depreciation rates of assets as specified in the 2014 Tariff Regulations and the details of the trued-up depreciation allowed during the 2014-19 period is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block (A)	1584.60	1584.60	1584.60	1584.60	1584.60
ACE (B)	0.00	0.00	0.00	0.00	0.00
Closing Gross Block (C)=(A+B)	1584.60	1584.60	1584.60	1584.60	1584.60
Average Gross Block (D)=[(A+C)/2]	1584.60	1584.60	1584.60	1584.60	1584.60
Weighted Average Rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28





Balance useful life of the asset (Year)	24	23	22	21	20
Elapsed Life of the asset (Year)	1	2	3	4	5
Depreciable Value	1426.14	1426.14	1426.14	1426.14	1426.14
Remaining Depreciable Value at the beginning of the year	1336.05	1252.38	1168.72	1085.05	1001.38
<b>Combined Depreciation during the year</b>	<b>83.67</b>	<b>83.67</b>	<b>83.67</b>	<b>83.67</b>	<b>83.67</b>
Cumulative Depreciation at the end of the year	173.76	257.42	341.09	424.76	508.42
Remaining Depreciable Value at the end of the year	1252.38	1168.72	1085.05	1001.38	917.72

19. Depreciation for the combined transmission assets as allowed vide order dated 21.10.2016 in Petition No. 145/TT/2016, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 21.10.2016 in Petition No. 145/TT/2016	83.67	83.67	83.67	83.67	83.67
Claimed by Petitioner in the instant petition	83.67	83.67	83.67	83.67	83.67
Approved after true-up in this order	83.67	83.67	83.67	83.67	83.67

### Interest on Loan (IoL)

20. The Petitioner has claimed Weighted Average Rate of Interest (WAROI) on loan based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on actual interest rate in accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed for the combined transmission assets for the 2014-19 tariff period is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1109.22	1109.22	1109.22	1109.22	1109.22
Cumulative repayments up to Previous Year	90.09	173.76	257.42	341.09	424.76
Net Loan-Opening	1019.13	935.46	851.80	768.13	684.46
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	83.67	83.67	83.67	83.67	83.67
Net Loan-Closing	935.46	851.80	768.13	684.46	600.80
Average Loan	977.30	893.63	809.96	726.30	642.63
Weighted Average Rate of Interest on Loan (in %)	9.0628	9.0359	9.0075	8.9543	8.9411



Interest on Loan	88.57	80.75	72.96	65.03	57.46
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21. IoL for the combined transmission asset as allowed vide order dated 21.10.2016 in Petition No. 145/TT/2016, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 21.10.2016 in Petition No. 145/TT/2016	88.57	81.02	73.43	65.82	58.21
Claimed by Petitioner in the instant petition	88.57	80.75	72.96	65.03	57.46
Approved after true-up in this order	88.57	80.75	72.96	65.03	57.46

### Return on Equity (RoE)

22. The Petitioner has claimed RoE for the combined transmission asset in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at Minimum Alternate Tax (MAT) rates and has claimed effective tax rates for the 2014-19 tariff period as follows:

Year	Claimed effective tax rate (in %)	Grossed-up RoE (in %) [(Base Rate)/(1-t)]
2014-15	21.02	19.625
2015-16	21.38	19.715
2016-17	21.34	19.705
2017-18	21.34	19.705
2018-19	21.55	19.758

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

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

24. MAT rates as allowed vide order dated 27.4.2020 in Petition No. 274/TT/2019 for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19



period, in terms of the provisions of the 2014 Tariff Regulations, are considered in the instant case which are as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Base rate of RoE (in %)	Grossed up RoE (in %) [(Base Rate)/(1-t)]
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

25. The Petitioner has claimed RoE for the 2014-19 period after grossing up the RoE @15.50% with Effective Tax rates (based on MAT rates) each year. RoE is trued-up on the basis of MAT rates applicable in the respective years and is approved for the combined transmission assets for the 2014-19 tariff period as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity (A)	475.38	475.38	475.38	475.38	475.38
Additions (B)	0.00	0.00	0.00	0.00	0.00
Closing Equity (C) = (A+B)	475.38	475.38	475.38	475.38	475.38
Average Equity (D) = [(A+C)/2]	475.38	475.38	475.38	475.38	475.38
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
<b>Return on Equity</b>	<b>93.22</b>	<b>93.68</b>	<b>93.68</b>	<b>93.68</b>	<b>93.92</b>

26. RoE for the combined transmission assets as allowed vide order dated 21.10.2016 in Petition No. 145/TT/2016, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 21.10.2016 in Petition No. 145/TT/2016	93.22	93.22	93.22	93.22	93.22
Claimed by Petitioner in the instant petition	93.23	93.68	93.68	93.68	93.93
Approved after true-up in this order	93.22	93.68	93.68	93.68	93.92





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

27. The Petitioner has submitted that the transmission assets covered under instant petition are approved as regional spares and kept as cold spare. Hence, no O&M Expenses have been claimed for bays.

28. We have considered the submissions of the Petitioner and in view of no claim pertaining to the O&M Expenses for the combined transmission assets for the 2014-19 tariff period, no O&M Expenses have been approved.

### Interest on Working Capital

29. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and the trued-up IWC approved for the combined transmission assets is as follows:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses (1 month of O&M expenses) [A]	0.00	0.00	0.00	0.00	0.00
Maintenance Spares (15% of O&M Expenses) [B]	0.00	0.00	0.00	0.00	0.00
Receivables (Equivalent to 2 months of annual fixed cost) [C]	45.26	44.01	42.68	41.33	40.08
<b>Total Working Capital [D] = (A+B+C)</b>	<b>45.26</b>	<b>44.01</b>	<b>42.68</b>	<b>41.33</b>	<b>40.08</b>
Rate of Interest (in %) [E]	13.50	13.50	13.50	13.50	13.50
<b>Interest on Working Capital [F] = (DxE)</b>	<b>6.11</b>	<b>5.94</b>	<b>5.76</b>	<b>5.58</b>	<b>5.41</b>

30. IWC for the combined transmission assets as allowed vide order dated 21.10.2016 in Petition No. 145/TT/2016, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 21.10.2016 in Petition No. 145/TT/2016	6.11	5.94	5.76	5.59	5.41
Claimed by Petitioner in the instant petition	6.11	5.94	5.76	5.58	5.41
Approved after true-up in this order	6.11	5.94	5.76	5.58	5.41



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

31. The trued-up Annual Fixed Charges (AFC) approved for the combined transmission assets for the 2014-19 tariff period are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	83.67	83.67	83.67	83.67	83.67
Interest on Loan	88.57	80.75	72.96	65.03	57.46
Return on Equity	93.22	93.68	93.68	93.68	93.92
Interest on Working Capital	6.11	5.94	5.76	5.58	5.41
O&M Expenses	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>271.57</b>	<b>264.03</b>	<b>256.06</b>	<b>247.96</b>	<b>240.46</b>

32. Accordingly, the Annual Transmission Charges as allowed vide order dated 21.10.2016 in Petition No. 145/TT/2016, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 21.10.2016 in Petition No. 145/TT/2016	271.57	263.84	256.08	248.29	240.51
Claimed by Petitioner in the instant petition	271.58	264.04	256.07	247.96	240.47
Approved after true-up in this order	271.57	264.03	256.06	247.96	240.46

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

33. The details of the transmission charges for the combined transmission assets for the 2019-24 tariff period as claimed by the Petitioner vide affidavit dated 19.7.2021 are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	83.67	83.67	83.67	83.67	83.67
Interest on Loan	50.07	42.60	35.13	27.82	20.56
Return on Equity	89.29	89.29	89.29	89.29	89.29
Interest on Working Capital	8.27	8.35	8.41	8.50	8.55
O&M Expenses	112.77	116.87	120.96	125.37	129.47
<b>Total</b>	<b>344.07</b>	<b>340.78</b>	<b>337.46</b>	<b>334.65</b>	<b>331.54</b>



34. The details of IWC for the combined transmission assets for the 2019-24 tariff period as claimed by the Petitioner vide affidavit dated 19.7.2021 are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	9.40	9.74	10.08	10.45	10.79
Maintenance Spares	16.92	17.53	18.14	18.81	19.42
Receivables	42.30	42.01	41.60	41.26	40.76
Total Working Capital	68.62	69.28	69.82	70.52	70.97
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>8.27</b>	<b>8.35</b>	<b>8.41</b>	<b>8.50</b>	<b>8.55</b>

### Capital Cost

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

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

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

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



- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
- (n) Expenditure on account of change in law and force majeure events; and
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

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

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly tried 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;
- (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."*

36. The Petitioner has submitted that the capital cost admitted by the Commission as on 31.3.2019 is ₹1584.60 lakh and same has been considered for computation of tariff for the 2019-24 period. Also, no ACE has been projected during the 2019-24 tariff period.

37. We have considered the submissions of the Petitioner and note that the capital cost of ₹1584.60 lakh has been admitted by the Commission as on 31.3.2019 in this order and, accordingly, the same 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.

38. In view of the above, the capital cost of the combined transmission assets as on 31.3.2024 is approved as follows:

(₹ in lakh)	
Capital Cost (as on 1.4.2019)	Capital Cost (as on 31.3.2024)
1584.60	1584.60

### **Debt-Equity Ratio**

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

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

*Provided that:*

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



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

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

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

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

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

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation."

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation."

40. The debt-equity ratio for the 2019-24 period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The debt-equity considered on normative basis as per the details submitted by the Petitioner for the purpose of computation of tariff for the 2019-24 tariff period is as follows:



Funding	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	1109.22	70.00	1109.22	70.00
Equity	475.38	30.00	475.38	30.00
<b>Total</b>	<b>1584.60</b>	<b>100.00</b>	<b>1584.60</b>	<b>100.00</b>

### Depreciation

41. Regulation 33 of the 2019 Tariff Regulations provides as follows:

**“33. Depreciation:** (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

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

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

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

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

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

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-I** to these regulations for the assets of the generating



station and transmission system:

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

(6) *In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.*

(7) *The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.*

(8) *In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.*

(9) *Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.*

(10) *Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of-*

- a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or*
- b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or*
- c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life."*

42. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. WAROD at Annexure-II has been worked out as per the rates of depreciation prescribed in the 2019 Tariff Regulations. The depreciation approved for the combined transmission assets for the 2019-24 tariff period is as follows:





(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block (A)	1584.60	1584.60	1584.60	1584.60	1584.60
ACE (B)	0.00	0.00	0.00	0.00	0.00
Closing Gross Block (C)=(A+B)	1584.60	1584.60	1584.60	1584.60	1584.60
Average Gross Block (D)=[(A+C)/2]	1584.60	1584.60	1584.60	1584.60	1584.60
Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
Balance useful life at the beginning of the year (Year)	19	18	17	16	15
Lapsed life of the asset at the beginning of the year (Year)	6	7	8	9	10
Depreciable Value	1426.14	1426.14	1426.14	1426.14	1426.14
<b>Depreciation during the year</b>	<b>83.67</b>	<b>83.67</b>	<b>83.67</b>	<b>83.67</b>	<b>83.67</b>
Cumulative Depreciation	592.09	675.76	759.43	843.09	926.76
Remaining Depreciation Value at the end of the year	834.05	750.38	666.71	583.05	499.38

### Interest on Loan

43. Regulation 32 of the 2019 Tariff Regulations provides as follows:

**“32. Interest on loan capital:** (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of 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.

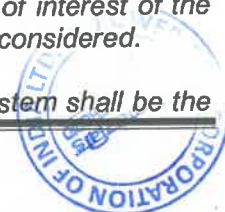
(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

(5a) The rate of interest on loan for installation of emission control system shall be the



*weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.*

(6) *The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*

(7) *The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing."*

44. WAROI on loan 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 will 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 approved for the combined transmission assets for the 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	1109.22	1109.22	1109.22	1109.22	1109.22
Cumulative Repayments up to Previous Year	508.42	592.09	675.76	759.43	843.09
Net Loan-Opening	600.80	517.13	433.46	349.79	266.13
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	83.67	83.67	83.67	83.67	83.67
Net Loan-Closing	517.13	433.46	349.79	266.13	182.46
Average Loan	558.96	475.30	391.63	307.96	224.29
Weighted Average Rate of Interest on Loan (in %)	8.9577	8.9642	8.9710	9.0347	9.1665
<b>Interest on Loan</b>	<b>50.07</b>	<b>42.61</b>	<b>35.13</b>	<b>27.82</b>	<b>20.56</b>

### Return on Equity

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

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

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

*Provided that return on equity in respect of additional capitalization after cut off date beyond the original scope, excluding additional capitalization on account of emission*



control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

Provided further that:

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

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

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

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

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

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

Where "t" is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act



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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."

46. The Petitioner has submitted that it is liable to pay Income Tax at MAT rate specified under the Taxation laws (Amendment) Ordinance 2019. Further, RoE has been calculated @19.758% after grossing up the RoE with MAT rate of 21.5488% based on the rate prescribed under Regulation 31(2) of the 2019 Tariff Regulations for the 2019-24 tariff period. As per Regulation 31(3) of the 2019 Tariff Regulations, 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 2019-24 tariff period on actual gross income. However, any penalty arising on account of delay in deposit or short deposit of tax amount shall not be claimed by it. Any under-recovery or over-recovery of grossed-up rate on RoE after



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truing up shall be recovered or refunded to beneficiaries or the long term customers on yearly basis. The Petitioner has further submitted that any adjustment due to additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable/ adjustable during the 2019-24 tariff period on yearly basis on receipt of Income Tax assessment order.

47. We have considered the submissions of the Petitioner. MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the combined transmission assets for the 2019-24 tariff period is as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity (A)	475.38	475.38	475.38	475.38	475.38
Additions (B)	0.00	0.00	0.00	0.00	0.00
Closing Equity (C) = (A+B)	475.38	475.38	475.38	475.38	475.38
Average Equity (D)= [(A+C)/2]	475.38	475.38	475.38	475.38	475.38
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
<b>Return on Equity</b>	<b>89.29</b>	<b>89.29</b>	<b>89.29</b>	<b>89.29</b>	<b>89.29</b>

#### Operation & Maintenance Expenses

48. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as follows:

**“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
<b>Norms for sub-station Bays (Rs Lakh per bay)</b>					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<b>Norms for Transformers (Rs Lakh per MVA)</b>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282



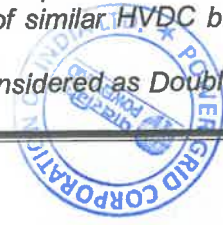
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<b>Norms for AC and HVDC lines (Rs Lakh per km)</b>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
<b>Norms for HVDC stations</b>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (Rs. 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;



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- (iii) the O&M expenses of  $\pm 500$  kV Mundra-Mohindergarh HVDC bipole scheme (2500 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for  $\pm 500$  kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- (iv) the O&M expenses of  $\pm 800$  kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for  $\pm 800$  kV, Bishwanath-Agra HVDC bi-pole scheme;
- (v) the O&M expenses of  $\pm 800$  kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for  $\pm 800$  kV, Bishwanath-Agra HVDC bi-pole scheme; and
- (vi) the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

(b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

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

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

Particulars	₹ in lakh				
	2019-20	2020-21	2021-22	2022-23	2023-24
<b>(400 kV sub-station ICT, 315 MVA Capacity)</b>					
Normative Rate of O&M as per the 2019 Tariff Regulations	0.358	0.371	0.384	0.398	0.411
Number of Units	1.00	1.00	1.00	1.00	1.00
<b>Total O&amp;M Expenses</b>	<b>112.77</b>	<b>116.87</b>	<b>120.96</b>	<b>125.37</b>	<b>129.47</b>

50. We have considered the submissions of the Petitioner. The Petitioner has claimed O&M Expenses for the combined transmission assets as per the normative O&M Expenses rates provided in Regulation 35(3)(a) of the 2019 Tariff Regulations. The Commission vide order dated 24.1.2021 in Petition No. 136/TT/2020 had dealt with the issue relating to O&M Expenses for spares ICTs. The relevant portion of the order dated 24.1.2021 is as follows:





"28. We are also not convinced with the Petitioner's clarification that it has not claimed O&M Expenses for the 2014-19 tariff period since the 2019 Tariff Regulations provide for O&M Expenses for transformers based on their rating. The norms specified in the 2019 Tariff Regulations are for transmission elements that are in regular use and not for spares which are used only in case of any eventualities. As already stated earlier, the „assets in use as spares“ are being granted tariff only on the basis of consent and approval of the concerned Regional Power Committee and as these assets are not being in regular use, we are of the view that O&M Expenses cannot be granted to the transmission assets. Accordingly, O&M Expenses are not allowed for the Combined Asset for the 2019-24 tariff period. We also feel that it is pertinent to mention here that disallowance of O&M Expenses for the Combined Asset does not mean that they do not need any maintenance and the consequent expenditure. The Combined Asset requires maintenance and the expenditure involved in maintaining them would be miniscule compared to the O&M Expenses in respect of transformers put to regular use. We are also of the view that the Petitioner should meet this expenditure from the O&M Expenses allowed for the regular ICTs installed at Mandola and Ludhiana in Northern Region. In case, the expenses are unusually high and cannot be met from the O&M Expenses allowed for the regular ICTs, the Petitioner may approach the Commission with certification of O&M Expenses from RPC at the time of true-up."

51. In view of the foregoing findings, as the combined transmission assets is a spare ICT, O&M Expenses for the same are not allowed.

#### **Interest on Working Capital**

52. Regulations 34(1)(c), 34(3), 34(4) and 3(7) of the 2019 Tariff Regulations provided as follows:

**"34. Interest on Working Capital: (1) The working capital shall cover:**

...  
**(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:**

- (i) Receivables equivalent to 45 days of annual fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
- (iii) Operation and maintenance expenses, including security expenses for one month."

**"(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1<sup>st</sup> 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 true-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24."**

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



**“3. Definitions ...**

(7) **‘Bank Rate’** means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;”

53. 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 considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21 and from 2021-22 onwards has been considered as 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points).

54. We have considered the submissions of the Petitioner. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations and the components of the working capital and interest allowed thereon for the combined transmission assets for the 2019-24 tariff period are as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (1 month of O&M Expenses) [A]	0.00	0.00	0.00	0.00	0.00
Maintenance Spares (15% of O&M Expenses) [B]	0.00	0.00	0.00	0.00	0.00
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges) [C]	27.83	26.95	25.99	25.08	24.10
<b>Total Working Capital [D] = [A+B+C]</b>	<b>27.83</b>	<b>26.95</b>	<b>25.99</b>	<b>25.08</b>	<b>24.10</b>
Rate of Interest (in %) [E]	12.05	11.25	10.50	10.50	10.50
<b>Interest on Working Capital [F] = [DxE]</b>	<b>3.35</b>	<b>3.03</b>	<b>2.73</b>	<b>2.63</b>	<b>2.53</b>

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

55. The transmission charges of the combined transmission assets for the 2019-24 tariff period are as follows:



(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	83.67	83.67	83.67	83.67	83.67
Interest on Loan	50.07	42.61	35.13	27.82	20.56
Return on Equity	89.29	89.29	89.29	89.29	89.29
Interest on Working Capital	3.35	3.03	2.73	2.63	2.53
O&M Expenses	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>226.38</b>	<b>218.59</b>	<b>210.81</b>	<b>203.41</b>	<b>196.04</b>

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

56. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. 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**

57. 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 Regulation 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

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

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

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



### **Security Expenses**

60. The Petitioner has submitted that security expenses for the combined 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.

61. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 approved security expenses from 1.4.2019 to 31.3.2024. Therefore, security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. Accordingly, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

### **Capital Spares**

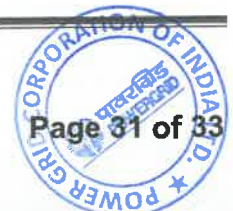
62. The Petitioner has sought reimbursement of capital spares at the end of tariff period. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

### **Sharing of Transmission Charges**

63. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations and with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of the transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the



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2020 Sharing Regulations. Billing, collection and disbursement of the transmission charges for subsequent period shall be governed in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

64. To summarise:

- a) The trued-up AFC approved for the combined transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)				
2014-15	2015-16	2016-17	2017-18	2018-19
271.57	264.03	256.06	247.96	240.46

- b) AFC allowed for the combined transmission assets for the 2019-24 tariff period in this order are as follows:

(₹ in lakh)				
2019-20	2020-21	2021-22	2022-23	2023-24
226.38	218.59	210.81	203.41	196.04

65. Annexure-I and Annexure-II given hereinafter form part of the order.

66. This order disposes of Petition No. 289/TT/2019 in terms of above discussions and findings.

sd/  
(P. K. Singh)  
Member

sd/  
(Arun Goyal)  
Member

sd/  
(I. S. Jha)  
Member

sd/  
(P. K. Pujari)  
Chairperson





## ANNEXURE-I

2014-19	Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	Projected Additional Capitalisation (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
			2014-15	2015-16	2016-17	2017-18	2018-19			Total	2014-15	2015-16	2016-17	2017-18
	Sub Station	1584.60	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	83.67	83.67	83.67	83.67	83.67
	<b>Total</b>	1584.60	0.00	0.00	0.00	0.00	0.00	0.00		83.67	83.67	83.67	83.67	83.67
			<b>Average Gross Block</b> (₹ in lakh)					1584.60		1584.60	1584.60	1584.60	1584.60	1584.60
			<b>Weighted Average Rate of Depreciation (in %)</b>							5.28%	5.28%	5.28%	5.28%	5.28%

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## Annexure-II

2019-24	Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected Additional Capitalisation (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
			2019-20	2020-21	2021-22	2022-23	2023-24			Total	2019-20	2020-21	2021-22	2022-23
	Sub Station	1584.60	-	-	-	-	-	1584.60	5.28%	83.67	83.67	83.67	83.67	83.67
	<b>Total</b>	1584.60	-	-	-	-	-	1584.60		83.67	83.67	83.67	83.67	83.67
			<b>Average Gross Block</b> (₹ in lakh)					1584.60		1584.60	1584.60	1584.60	1584.60	1584.60
			<b>Weighted Average Rate of Depreciation (in %)</b>							5.28%	5.28%	5.28%	5.28%	5.28%



## Summary of Tariff

Form No. - 1

Name of the Transmission Licensee:		Power Grid Corporation of India Limited	
Project	Provision of Spare ICT s & Reactor s for SR Region		
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s		
Region	Southern Region	DOC Date	Mar 1, 2013

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Year Days	366.00	365.00	365.00	365.00	366.00
Tariff Days	366.00	365.00	365.00	365.00	366.00
Depreciation-Form No. 10A	83.67	83.67	83.67	83.67	83.67
Interest on Loan-Form No. 9E	50.00	42.33	34.90	27.70	20.55
Return on Equity-Form No. 8	89.29	89.29	89.29	89.29	89.29
Int. on Working capital-Form No.11	3.35	3.03	2.73	2.63	2.90
Op. and maintenance-Form No.2	0.00	0.00	0.00	0.00	0.00
Total AFC	226.31	218.32	210.59	203.29	196.41

(Petitioner)





**Normative parameters considered for tariff computations**

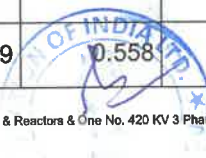
Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Provision of Spare ICT s & Reactor s for SR Region		
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s		
Region	Southern Region	DOCOC Date	Mar 1, 2013

(Amount in Rs. Lakh)

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

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



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**Calculation of ROE**

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Provision of Spare ICT s & Reactor s for SR Region		
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s		
Region	Southern Region	DOC Date	Mar 1, 2013

(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	475.38	475.38	475.38	475.38	475.38
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)	475.38	475.38	475.38	475.38	475.38
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	475.38	475.38	475.38	475.38	475.38
Average Normative Equity	475.38	475.38	475.38	475.38	475.38
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	89.29	89.29	89.29	89.29	89.29
Pro rata return on Equity	89.29	89.29	89.29	89.29	89.29

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

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	Provision of Spare ICT s & Reactor s for SR Region				
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s				
Region	Southern Region	DOCOC Date	Mar 1, 2013		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>BOND-XXXIV -DOCOC FUNDING</b>					
Gross Loan- Opening	188.78	188.78	188.78	188.78	188.78
Cumulative repayments of Loans upto previous year	78.66	94.39	110.12	125.85	141.59
Net loan-Opening	110.12	94.39	78.66	62.93	47.19
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	15.73	15.73	15.73	15.73	15.73
Net Loan-Closing	94.39	78.66	62.93	47.20	31.46
Average Net Loan	102.26	86.53	70.80	55.07	39.33
Rate of Interest on Loan on Annual Basis	8.84	8.84	8.84	8.84	8.84
Interest on loan	9.0398	7.6493	6.2587	4.8682	3.4768

<b>BOND XXXVIII -DOCOC FUNDING</b>					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Loan- Opening	400.00	400.00	400.00	400.00	400.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	400.00	400.00	400.00	400.00	400.00
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	400.00	400.00	400.00	400.00	400.00



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Average Net Loan	400.00	400.00	400.00	400.00	400.00
Rate of Interest on Loan on Annual Basis	9.25	9.25	9.25	9.25	9.25
Interest on loan	37.00	37.00	37.00	37.00	37.00

#### SBI (21.03.2012) -ADD CAP LOAN

Gross Loan- Opening	70.44	70.44	70.44	70.44	70.44
Cumulative repayments of Loans upto previous year	19.19	25.58	31.98	38.38	44.77
Net loan-Opening	51.25	44.86	38.46	32.06	25.67
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	6.40	6.40	6.40	6.40	6.40
Net Loan-Closing	44.85	38.46	32.06	25.66	19.27
Average Net Loan	48.05	41.66	35.26	28.86	22.47
Rate of Interest on Loan on Annual Basis	7.995219	6.898405	6.65	7.233189	8.134574
Interest on loan	3.8417	2.8739	2.3448	2.0875	1.8278

#### BOND - XLII -DOCO FUNDING

Gross Loan- Opening	450.01	450.01	450.01	450.01	450.01
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	450.01
Net loan-Opening	450.01	450.01	450.01	450.01	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	450.01	0.00
Net Loan-Closing	450.01	450.01	450.01	0.00	0.00
Average Net Loan	450.01	450.01	450.01	225.01	0.00
Rate of Interest on Loan on Annual Basis	8.80	8.80	8.80	8.80	8.80
Interest on loan	39.6009	39.6009	39.6009	19.8009	0.00





Summary

Gross Loan- Opening	1,109.23	1,109.23	1,109.23	1,109.23	1,109.23
Cumulative repayments of Loans upto previous year	97.85	119.97	142.10	164.23	636.37
Net loan-Opening	1,011.38	989.26	967.13	945.00	472.86
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	22.13	22.13	22.13	472.14	22.13
Net Loan-Closing	989.25	967.13	945.00	472.86	450.73
Average Net Loan	1,000.32	978.20	956.07	708.94	461.80
Rate of Interest on Loan on Annual Basis	8.9454	8.9066	8.9119	8.9932	9.1608
Interest on loan	89.4824	87.1241	85.2044	63.7566	42.3046





**Calculation of interest on Normative loan**

Form No. - 9E

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	Provision of Spare ICT s & Reactor s for SR Region		
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s		
Region	Southern Region	DOC Date	Mar 1, 2013

(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	1,109.22	1,109.22	1,109.22	1,109.22	1,109.22
Cumulative repayments of Normative loan upto previous year	508.42	592.09	675.76	759.43	843.10
Net normative loan-Opening	600.80	517.13	433.46	349.79	266.12
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	83.67	83.67	83.67	83.67	83.67
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	517.13	433.46	349.79	266.12	182.45
Average normative loan	558.97	475.30	391.63	307.96	224.29
Weighted Average Rate of interest on actual loan	8.9454	8.9066	8.9119	8.9932	9.1608
Interest on normative loan	50.00	42.33	34.90	27.70	20.55
Pro rata interest on normative loan	50.00	42.33	34.90	27.70	20.55



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

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Provision of Spare ICT s & Reactor s for SR Region		
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s		
Region	Southern Region	DOCO Date	Mar 1, 2013

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2024
<b>2019-20</b>						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	1,584.60	0.00	1,584.60	1,584.60	5.28	83.67
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	6.33	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/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
<b>TOTAL</b>	<b>1,584.60</b>	<b>0.00</b>	<b>1,584.60</b>	<b>1,584.60</b>	<b>0.00</b>	<b>83.67</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.280197</b>	

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

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Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	1,584.60	0.00	1,584.60	1,584.60	5.28	83.67
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	6.33	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/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
<b>TOTAL</b>	<b>1,584.60</b>	<b>0.00</b>	<b>1,584.60</b>	<b>1,584.60</b>	<b>0.00</b>	<b>83.67</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.280197</b>	

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	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	1,584.60	0.00	1,584.60	1,584.60	5.28	83.67
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	6.33	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/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
<b>TOTAL</b>	<b>1,584.60</b>	<b>0.00</b>	<b>1,584.60</b>	<b>1,584.60</b>	<b>0.00</b>	<b>83.67</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.280197</b>	

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2022-23						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	1,584.60	0.00	1,584.60	1,584.60	5.28	83.67
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	6.33	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/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
<b>TOTAL</b>	<b>1,584.60</b>	<b>0.00</b>	<b>1,584.60</b>	<b>1,584.60</b>	<b>0.00</b>	<b>83.67</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.280197</b>	

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	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	1,584.60	0.00	1,584.60	1,584.60	5.28	83.67
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	6.33	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/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
<b>TOTAL</b>	<b>1,584.60</b>	<b>0.00</b>	<b>1,584.60</b>	<b>1,584.60</b>	<b>0.00</b>	<b>83.67</b>

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Weighted Average Rate of Depreciation(%)					5.280197	
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**Statement of Depreciation**

Form No. - 10A

Name of the Transmission Licensee		Power Grid Corporation of India Limited			
Project	Provision of Spare ICT s & Reactor s for SR Region				
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s				
Region	Southern Region	DOCOC Date	Mar 1, 2013		

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	366.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
<b>Life at the beginning of the year</b>					
1.1 Weighted Average useful life of the Asset/ Project	25.00	25.00	25.00	25.00	25.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	6.00	7.00	8.00	9.00	10.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	19.00	18.00	17.00	16.00	15.00
<b>Capital Base</b>					
1.4 Opening capital cost	1,584.60	1,584.60	1,584.60	1,584.60	1,584.60
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	1,584.60	1,584.60	1,584.60	1,584.60	1,584.60
1.8 Average capital cost	1,584.60	1,584.60	1,584.60	1,584.60	1,584.60
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	1,584.60	1,584.60	1,584.60	1,584.60	1,584.60
1.12 Depreciable Value(1.10+90% of 1.11)	1,426.14	1,426.14	1,426.14	1,426.14	1,426.14
<b>Depreciation for the period and Cum. Depreciation</b>					
1.13 Weighted Average Rate of depreciation	5.280197	5.280197	5.280197	5.280197	5.280197



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1.14 Depreciation(for the period)	83.67	83.67	83.67	83.67	83.67
1.15 Depreciation(Annualised)	83.67	83.67	83.67	83.67	83.67
1.16 Cumulative depreciation at the beginning of the period	508.42	592.09	675.76	759.43	843.10
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	592.09	675.76	759.43	843.10	926.77
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00



**Calculation of interest on working Capital**

Form No. - 11

Name of the Transmission Licensee		Power Grid Corporation of India Limited			
Project	Provision of Spare ICT s & Reactor s for SR Region				
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s				
Region	Southern Region	DOC Date	Mar 1, 2013		

(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	0.00	0.00	0.00	0.00	0.00
Maintenance spares 15% of O&M Expenses	0.00	0.00	0.00	0.00	0.00
Receivables equivalent to 45 days of AFC	27.83	26.92	25.96	25.06	24.15
Total Working capital	27.83	26.92	25.96	25.06	24.15
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	3.35	3.03	2.73	2.63	2.90
Pro rata interest on working capital	3.35	3.03	2.73	2.63	2.90



End-3

**Summary of Tariff**

Form No. - 1

Name of the Transmission Licensee:		Power Grid Corporation of India Limited			
Project	Provision of Spare ICT s & Reactor s for SR Region				
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s				
Region	Southern Region	DOCOC Date	Mar 1, 2013		

(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	83.67	31.98	31.98	31.98	31.98
Interest on Loan-Form No. 9E	12.92	7.63	4.69	1.74	0.13
Return on Equity-Form No. 8	89.29	89.29	89.29	89.29	89.29
Int. on Working capital-Form No.11	2.77	1.92	1.88	1.83	1.81
Op. and maintenance-Form No.2	0.00	0.00	0.00	0.00	0.00
Total AFC	188.65	130.82	127.84	124.84	123.21



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**Normative parameters considered for tariff computations**

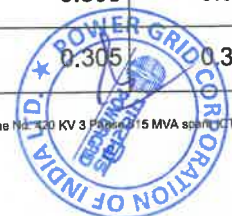
Form No. - 3

Name of the Transmission Licensee		Power Grid Corporation of India Limited			
Project	Provision of Spare ICT s & Reactor s for SR Region				
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s				
Region	Southern Region	DOC Date	Mar 1, 2013		

(Amount in Rs. Lakh)

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

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220 kV	0.00	0.262	0.276	0.29	0.305	0.322
132 kV and below	0.00	0.262	0.276	0.29	0.305	0.322
<b>Norms for AC and HVDC lines (Rs Lakh per km)</b>						
Single Circuit (Bundled Conductor with six or more sub-conductors)	1.011	0.861	0.906	0.953	1.003	1.056
Single Circuit (Bundled conductor with four sub-conductors)	0.867	0.738	0.776	0.817	0.86	0.905
Single Circuit (Twin & Triple Conductor)	0.578	0.492	0.518	0.545	0.573	0.603
Single Circuit (Single Conductor)	0.289	0.246	0.259	0.272	0.287	0.302
Double Circuit (Bundled conductor with four or more sub-conductors)	1.517	1.291	1.359	1.43	1.506	1.585
Double Circuit (Twin & Triple Conductor)	1.011	0.861	0.906	0.953	1.003	1.056
Double Circuit (Single Conductor)	0.433	0.369	0.388	0.409	0.43	0.453
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.662	2.266	2.385	2.51	2.642	2.781
Multi Circuit (Twin & Triple Conductor)	1.773	1.509	1.588	1.671	1.759	1.851
<b>Norms for HVDC stations (Rs Lakh/MW)</b>						
HVDC 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**

Form No. - 8

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	Provision of Spare ICT s & Reactor s for SR Region		
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s		
Region	Southern Region	DOCO Date	Mar 1, 2013

(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	475.38	475.38	475.38	475.38	475.38
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)	475.38	475.38	475.38	475.38	475.38
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	475.38	475.38	475.38	475.38	475.38
Average Normative Equity	475.38	475.38	475.38	475.38	475.38
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	89.29	89.29	89.29	89.29	89.29
Return on Equity	89.29	89.29	89.29	89.29	89.29



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

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Provision of Spare ICT s & Reactor s for SR Region		
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s		
Region	Southern Region	DOCO Date	Mar 1, 2013

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
<b>BOND-XXXIV -DOCO FUNDING</b>					
Gross Loan- Opening	188.78	188.78	188.78	188.78	188.78
Cumulative repayments of Loans upto previous year	157.32	173.05	188.78	188.78	188.78
Net loan-Opening	31.46	15.73	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	15.73	15.73	0.00	0.00	0.00
Net Loan-Closing	15.73	0.00	0.00	0.00	0.00
Average Net Loan	23.60	7.87	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	2.0862	0.6957	0.00	0.00	0.00

<b>BOND XXXVIII -DOCO FUNDING</b>					
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Gross Loan- Opening	400.00	400.00	400.00	400.00	400.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	400.00	400.00
Net loan-Opening	400.00	400.00	400.00	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	400.00	0.00	0.00
Net Loan-Closing	400.00	400.00	0.00	0.00	0.00



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Average Net Loan	400.00	400.00	200.00	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	37.00	37.00	18.50	0.00	0.00

#### SBI (21.03.2012) -ADD CAP LOAN

Gross Loan- Opening	70.44	70.44	70.44	70.44	70.44
Cumulative repayments of Loans upto previous year	51.17	57.56	63.96	70.44	70.44
Net loan-Opening	19.27	12.88	6.48	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	6.40	6.40	6.48	0.00	0.00
Net Loan-Closing	12.87	6.48	0.00	0.00	0.00
Average Net Loan	16.07	9.68	3.24	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.20	8.20	8.20	8.20	8.20
Interest on loan	1.3177	0.7938	0.2657	0.00	0.00

#### BOND - XLII -DOCO FUNDING

Gross Loan- Opening	450.01	450.01	450.01	450.01	450.01
Cumulative repayments of Loans upto previous year	450.01	450.01	450.01	450.01	450.01
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.80	8.80	8.80	8.80	8.80
Interest on loan	0.00	0.00	0.00	0.00	0.00



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Summary

Gross Loan- Opening	1,109.23	1,109.23	1,109.23	1,109.23	1,109.23
Cumulative repayments of Loans upto previous year	658.50	680.62	702.75	1,109.23	1,109.23
Net loan-Opening	450.73	428.61	406.48	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	22.13	22.13	406.48	0.00	0.00
Net Loan-Closing	428.60	406.48	0.00	0.00	0.00
Average Net Loan	439.67	417.55	203.24	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.1896	9.2179	9.2333	9.2333	9.2333
Interest on loan	40.4039	38.4895	18.7657	0.00	0.00



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**Calculation of interest on Normative loan**

Form No. - 9E

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	Provision of Spare ICT s & Reactor s for SR Region		
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s		
Region	Southern Region	DOCOC Date	Mar 1, 2013

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the Year	365.00	365.00	365.00	366.00	365.00
No. of days for which Tariff claimed	365.00	365.00	365.00	366.00	365.00
Gross normative loan-Opening	1,109.22	1,109.22	1,109.22	1,109.22	1,109.22
Cumulative repayments of Normative loan upto previous year	926.77	1,010.44	1,042.42	1,074.40	1,106.38
Net normative loan-Opening	182.45	98.78	66.80	34.82	2.84
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	83.67	31.98	31.98	31.98	2.84
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	98.78	66.80	34.82	2.84	0.00
Average normative loan	140.62	82.79	50.81	18.83	1.42
Weighted Average Rate of interest on actual loan	9.1896	9.2179	9.2333	9.2333	9.2333
Interest on normative loan	12.92	7.63	4.69	1.74	0.13
Pro rata interest on normative loan	12.92	7.63	4.69	1.74	0.13



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

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Provision of Spare ICT s & Reactor s for SR Region		
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s		
Region	Southern Region	DOC Date	Mar 1, 2013

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2029
<b>2024-25</b>						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	1,584.60	0.00	1,584.60	1,584.60	5.28	83.67
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	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
<b>TOTAL</b>	<b>1,584.60</b>	<b>0.00</b>	<b>1,584.60</b>	<b>1,584.60</b>	<b>0.00</b>	<b>83.67</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>5.280197</b>	

**2025-26**

Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
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Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	1,584.60	0.00	1,584.60	1,584.60	5.28	31.98
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/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
<b>TOTAL</b>	<b>1,584.60</b>	<b>0.00</b>	<b>1,584.60</b>	<b>1,584.60</b>	<b>0.00</b>	<b>31.98</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>2.018175</b>	

<b>2026-27</b>						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	1,584.60	0.00	1,584.60	1,584.60	5.28	31.98
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/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
<b>TOTAL</b>	<b>1,584.60</b>	<b>0.00</b>	<b>1,584.60</b>	<b>1,584.60</b>	<b>0.00</b>	<b>31.98</b>
<b>Weighted Average Rate of Depreciation(%)</b>					<b>2.018175</b>	

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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	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	1,584.60	0.00	1,584.60	1,584.60	5.28	31.98
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/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
<b>TOTAL</b>	<b>1,584.60</b>	<b>0.00</b>	<b>1,584.60</b>	<b>1,584.60</b>	<b>0.00</b>	<b>31.98</b>
<b>Weighted Average Rate of Depreciation(%)</b>					2.018175	

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	0.00	0.00	0.00	0.00	5.28	0.00
Sub Station	1,584.60	0.00	1,584.60	1,584.60	5.28	31.98
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	15.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/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
<b>TOTAL</b>	<b>1,584.60</b>	<b>0.00</b>	<b>1,584.60</b>	<b>1,584.60</b>	<b>0.00</b>	<b>31.98</b>



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Weighted Average Rate of Depreciation(%)					2.018175	
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A handwritten signature in blue ink, consisting of stylized, overlapping loops.

**Statement of Depreciation**

Form No. - 10A

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	Provision of Spare ICT s & Reactor s for SR Region		
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s		
Region	Southern Region	DOCOCO Date	Mar 1, 2013

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
<b>Life at the beginning of the year</b>					
1.1 Weighted Average useful life of the Asset/ Project	25.00	25.00	25.00	25.00	25.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	11.00	12.00	13.00	14.00	15.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	14.00	13.00	12.00	11.00	10.00
<b>Capital Base</b>					
1.4 Opening capital cost	1,584.60	1,584.60	1,584.60	1,584.60	1,584.60
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	1,584.60	1,584.60	1,584.60	1,584.60	1,584.60
1.8 Average capital cost	1,584.60	1,584.60	1,584.60	1,584.60	1,584.60
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	1,584.60	1,584.60	1,584.60	1,584.60	1,584.60
1.12 Depreciable Value(1.10+90% of 1.11)	1,426.14	1,426.14	1,426.14	1,426.14	1,426.14
<b>Depreciation for the period and Cum. Depreciation</b>					
1.13 Weighted Average Rate of depreciation	5.280197	2.018175	2.018175	2.018175	2.018175

*sq*



1.14 Depreciation(for the period)	83.67	31.98	31.98	31.98	31.98
1.15 Depreciation(Annualised)	83.67	31.98	31.98	31.98	31.98
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	926.77	1,010.44	1,042.42	1,074.40	1,106.38
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	1,010.44	1,042.42	1,074.40	1,106.38	1,138.36

(Petitioner)



**Calculation of interest on working Capital**

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Provision of Spare ICT s & Reactor s for SR Region		
Element Description	Comb Assets of Provision of Spare ICT & Reactors & One No. 420 KV 3 Phase 315 MVA spare ICT for Hyderabad S/s		
Region	Southern Region	DOC Date	Mar 1, 2013

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
O&M Expenses-one month	0.00	0.00	0.00	0.00	0.00
Maintenance spares 15% of O&M Expenses	0.00	0.00	0.00	0.00	0.00
Receivables equivalent to 45 days of AFC	23.26	16.13	15.76	15.35	15.19
Total Working capital	23.26	16.13	15.76	15.35	15.19
Bank Rate as on 01.04.2019 or as on 01st April of the COD year, whichever is later.	11.90	11.90	11.90	11.90	11.90
Interest on working capital	2.77	1.92	1.88	1.83	1.81
Pro rata interest on working capital	2.77	1.92	1.88	1.83	1.81



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Summary of issue involved in the petition		PART-III FORM- 15	
1. Name of the Petitioner	Powergrid Corporation of India Ltd		
2. Petition Category	Transmission		
3. Tariff Period	2024-29		
4. Name of the Project	Provision of Spare ICTs and Reactors for Southern Region forming part of Provision of Spare ICTs and Reactors for Eastern, Northern, Southern and Western Region		
5. Investment Approval date			
6. SCOD of the Project			
7. Actual COD of the project	01.03.2013		
8. Whether entire scope is covered in the present petition.	Yes		
9. No. of Assets covered in instant petition	01 no		
10. No. of Assets having time over run			
11. Estimated Project Cost as per IA			
12. Is there any REC? if so, provide the date			
13. Revised Estimated Project Cost (if any)			
14. Completion cost for all the assets covered in the instant petition.	Rs. 1584.60 Lakh		
15. No. of Assets covered in instant petition and having cost overrun.	NIL		
16	Prayer in brief		
17	Key details and any Specific issue involved: No add-cap during 2019-24 & 2024-29		
18	Respondents		
	Name of Respondents		
	1	TANGEDCO	2. BESCOM
	3	KSEB	4. GESCOM.
	5	APCPDCL	6. HESCOM
	7	Electricity Department, Govt of Pondicherry	8. MESCOM
	9	APEPDCL	10. CESC
	11	APSPDCL	12. Electricity Department, Government of Goa
	13	TSSPDCL	14. TSNPDCL



**PART-III**

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

<b>Name of the Petitioner</b>	Powergrid Corporation of India Ltd
<b>Tariff Period</b>	2024-29
<b>Name of the Transmission Project</b>	Provision of Spare ICTs and Reactors for Southern Region forming part of Provision of Spare ICTs and Reactors for Eastern, Northern, Southern and Western Region
<b>COD of the Project (if entire scope of project is completed)</b>	01.03.2013
	<b>Rupees in lakh</b>

**A) Summary of Capital Cost as on COD and Additional Capital Expenditure claimed for all the assets Covered in the instant petition.**

S. No.	Asset No.	COD	Cut-off Date	i) Apportioned Approved Cost		ii) Summary of Actual / Projected Capital Cost										Capital Cost as on Cut-off Date
				As per IA	As per RCE	As on COD	2024-25	2025-26	2026-27	2027-28	2028-29	2028-29	Capital Cost as on 31.03.2029			
1	Asset-1	01.03.2013	31.03.2016	0.00	0.00	1584.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1584.60
<b>Total Capital Cost Claimed</b>				0.00	0.00	1584.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1584.60

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

S. No.	Asset No.	Asset Name and its location	2024-25	2025-26	2026-27	2027-28	2028-29
1	Asset-1	Provision of Spare ICTs and Reactors for Southern Region forming part of Provision of Spare ICTs and Reactors for Eastern, Northern, Southern and Western Region	188.65	130.82	127.84	124.84	123.21
<b>Total AFC for all the Assets</b>			188.65	130.82	127.84	124.84	123.21

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



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## PART-III

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

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



S. No.	Information/Document	Tick
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC)	N.A.
2	Region wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & Annexure for the new Transmission System & Communication System for the relevant years.	N.A.
3	Copies of relevant loan Agreements	N.A.
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	N.A.
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	N.A.
6	Copies of the BPTA/TSA/PPA with the beneficiaries, if any	N.A.
7	Detailed note giving reasons of cost and time over run, if applicable. List of supporting documents to be submitted: a. Detailed Project Report b. CPM Analysis c. PERT Chart and Bar Chart d. Justification for cost and time Overrun	N.A.
8	Transmission Licensee shall submit copy of Cost Audit Report along with cost accounting records, cost details, statements, schedules etc. for the transmission system as submitted to the Govt. of India for first two years i.e. 2019-20 and 2020-21 at the time of mid-term true-up in 2021-22 and for balance period of tariff period 2019-24 at the time of final true-up in 2024-25. In case of initial tariff filing the latest available Cost Audit Report should be furnished.	N.A.
9.	BBMB is maintaining the records as per the relevant applicable Acts. Formats specified herein may not be suitable to the available information with BBMB. BBMB may modify formats suitably as per available information to them for submission of required information for tariff purpose.	N.A.
10.	Any other relevant information, (Please specify)	N.A.
<p><b>Note 1:</b> 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.</p>		



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