

BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. ___ /TT/ ___

IN THE MATTER OF: -

Petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for assets under “**System Strengthening Scheme in Singrauli-Vindhyachal corridor in the Northern Region**” under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

Power Grid Corporation of India Ltd.

--- PETITIONER

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

--- RESPONDENT(S)

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

FILED BY
POWER GRID CORPORATION OF INDIA LTD.

GURGAON

DATED: 29.07.2024

REPRESENTED BY


(V.C. Sekhar)
Sr. General Manager (Regulatory Cell)



**BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
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Lucknow - 226 001

Represented by Its Chairman

And others

----- RESPONDENT(S)

To

The Secretary

Central Electricity Regulatory Commission

New Delhi 110001

Sir,

The present tariff Petition is filed under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff)



Regulations, 2024 and same may please be registered and taken on record by the Hon'ble Commission.

GURGAON

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DATED:- 29.07.2024

POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY


(V.C. Sekhar)

Sr. General Manager (Regulatory Cell)



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Uttar Pradesh Power Corporation Ltd.

---- RESPONDENT(S)

Shakti Bhawan, 14, Ashok Marg

Lucknow - 226 001

Represented by Its Chairman

And others

MEMO OF PARTIES

Power Grid Corporation of India Ltd.

VERSUS

--- PETITIONER

Northern Region

--- RESPONDENT

1. UTTAR PRADESH POWER CORPORATION LTD.
SHAKTI BHAWAN, 14, ASHOK MARG
LUCKNOW - 226 001
REPRESENTED BY ITS CHAIRMAN
2. AJMER VIDYUT VITRAN NIGAM LTD
CORPORATE OFFICE, VIDYUT BHAWAN,
PANCHSHEEL NAGAR, MAKARWALI ROAD
AJMER-305004 (RAJASTHAN)
REPRESENTED BY ITS MANAGING DIRECTOR



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



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

GURGAON

DATED: 29.07.2024

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY


(V.C. Sekhar)
Sr. General Manager (Regulatory Cell)



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Uttar Pradesh Power Corporation Ltd.

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Lucknow - 226 001

Represented by Its Chairman

And others

--- RESPONDENT(S)

MEMO OF APPEARANCE

POWER GRID CORPORATION OF INDIA LTD.

-- PETITIONER

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



I, V.C. Sekhar, the Petitioner above named do hereby nominate to act, plead and appear on my behalf in the aforesaid matter.

IN WITNESS WHEREOF I have set and subscribed my hands to this writing on this 29th day of July 2024.

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.

GURGAON

DATED:- 29.07.2024


(V.C. Sekhar)
Sr. General Manager (Regulatory Cell)



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A. Executive Summary of the Petition:

(i) Brief Background of the Petitioner

1. The Petitioner herein, Power Grid Corporation of India Ltd. (Hereinafter referred to as “**POWERGRID/Petitioner**”) is a Government Company within the meaning of the Companies Act, 2013. POWERGRID is deemed transmission licensee in terms of Section 14 of the Electricity Act, 2003. POWERGRID by virtue of a transmission licensee is required to inter-alia build, own, operate and maintain an efficient, coordinated and economical inter-state transmission system (“**ISTS**”). POWERGRID operates and functions within the regulatory control of this Hon'ble Central Electricity Regulatory Commission (hereinafter referred to as “**Hon'ble Commission**”). Tariff for





the transmission system established by POWERGRID is required to be determined by this Hon'ble Commission in accordance with the Tariff Regulations as notified by this Hon'ble Commission in exercise of its powers under Section 178 of the Electricity Act, 2003.

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

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

(iii) Background of Transmission Assets:

2. POWERGRID has filed the present petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for below asset in Northern Region:

Asset No	Asset Name	DOCO	Remarks
Combined Asset	400 kV Vindhyachal-Kanpur line at Singrauli along with bays at Singrauli end (Realignment of Vindhyachal-Kanpur S/C line at Singrauli and Singrauli Vindhyachal 2nd 400 kV Ckt) and Bus coupler bay at Vindhyachal HVDC	01.05.2007	--

(iv) Summary of Claims:

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



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

Rs in lakhs

Asset No.	Apportioned Approved Cost as per FR	Expenditure Up to DOCO /31.03.2019	Expenditure during 2019-24 tariff block	Actual Cost as on 31.03.2024
Combined Asset	2179.00	1889.85	No add cap	1889.85

Rs in lakhs

Asset No.	Apportioned Approved Cost as per FR	Expenditure Up to 31.03.2024	Expenditure during 2024-29 tariff block	Actual Cost as on 31.03.2029
Combined Asset	2179.00	1889.85	No add cap	1889.85

5. Details of tariff claimed are as under:

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

Rs in Lakhs

Name of the asset	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-1	AFC approved	294.08	219.98	219.41	218.88	219.81
	Revised AFC based on truing up	294.08	219.96	219.06	218.54	220.15

Tariff claimed for 2024-29 tariff block:

Rs in Lakhs

Name of the asset	2024-25	2025-26	2026-27	2027-28	2028-29
Asset-1	226.02	230.54	235.23	240.21	245.51

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

B. Detailed Petition:

MOST RESPECTFULLY SHOWETH:



Issue wise submission(s):

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

Asset No	Asset Name	DOCO	Remarks
Combined Asset	400 kV Vindhyachal-Kanpur line at Singrauli along with bays at Singrauli end (Realignment of Vindhyachal-Kanpur S/C line at Singrauli and Singrauli Vindhyachal 2nd 400 kV Ckt) and Bus coupler bay at Vindhyachal HVDC	01.05.2007	Earlier covered under petition no. 474/TT/2019 now covered under instant petition

10. Cost details:

The capital cost of Rs. 1889.85 Lakhs for subject Asset has been admitted by Hon'ble commission vide order dated 20.04.2021 in petition no. 474/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:

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

Regulation 13 of Tariff Regulation, 2019:

Quote

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

-----”

Unquote

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

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

Quote

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

Unquote

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

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

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

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

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

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

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

While filing Tariff petition for 2019-24 period, the petitioner had prayed for allowing the floating rate of Interest on loan adjustments. As per Hon'ble Commission order dated

18.04.2022 in petition no. 26/TT/2021, it has been stated that the weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019 and accordingly, the floating rate of interest on actual, applicable from time to time, if any, during 2019-24 tariff shall be considered at the time of true up or next revision of tariff.

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

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

Rs in Lakh

Project		2019-20	2020-21	2021-22	2022-23	2023-24
Asset-1	AFC approved	294.08	219.98	219.41	218.88	219.81
	Revised AFC based on truing up	294.08	219.96	219.06	218.54	220.15

Tariff filing forms along with the other relevant information and supporting documents are attached hereto as **Encl-2**.

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

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

Rs in Lakh

Project		2024-25	2025-26	2026-27	2027-28	2028-29
Asset-1	AFC	226.02	230.54	235.23	240.21	245.51



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

14. The asset has completed 12 Yrs of life in 2019-20, and thus the remaining depreciable amount at end of 12 yrs have been spread over the balance useful life of the asset as per clause 33 (5) of the CERC Tariff Regulations, 2024. The details have been computed and are provided in Form- 10 A.
15. That, it is submitted that the petitioner is currently liable to pay income tax at MAT rate specified in Income-tax Act,1961. Therefore, ROE has been calculated @ 18.782% after grossing up the ROE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given at regulation 31 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for 2024-29 period. That as per clause 31 (3) of the above regulation, the grossed up rate of ROE at the end of every financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the tariff period 2024-29 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on ROE after truing up shall be recovered or refunded to beneficiaries or the long-term customers, as the case may be on year to year basis. It is further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable /adjustable during the tariff period 2024-29 on year to year basis on receipt of Income Tax assessment order.
16. Under CGST Act, 2017 implemented w.e.f. 01.07.2017, the Govt. of India has exempted the charges of transmission of electricity vide notification no. 12/2017 – Central Tax (Rate) dated 28.06.2017 at serial no. 25 under the heading 9969 “Transmission or distribution of electricity by an electric transmission or distribution utility” by giving applicable GST rate as NIL. Hence, the Transmission Charges as indicated at para 12 and para-13 above is exclusive of GST. Further, if GST is levied at any rate and at any point of time in future on Charges of Transmission of Electricity, the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged & billed separately by the petitioner. Further additional



taxes, if any, are to be paid by the petitioner on account of demand from Govt. / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

17. In the tariff calculations for 2019-24 period, Interest on Loan has been calculated on the basis of actual rate of interest of various loans deployed for each year. In the tariff calculations for 2024-29 period, Interest on Loan has been calculated on the basis of interest rates prevailing as on 01.04.2024 for respective loans. The change in Interest rate due to floating rate of interest applicable, if any, for the project needs to be claimed / adjusted over the tariff block of 05 years directly from / with the beneficiaries.

For the purpose of the supporting documents for rate of interest, a compendium of floating rate of interest of various loans during the tariff period 2019-24 will be submitted shortly with a Truing-up petition and the details of the same will be submitted through an affidavit once submitted. These documents/details will also be made available on our website www.powergrid.in.

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

Security Expenses:

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

Insurance:

In this regard, it is submitted that a separate petition shall be filed before Hon'ble Commission for claiming the overall Insurance Expenses and consequential Interest



on Working Capital (IOWC) on the same considering actual Insurance Expense incurred by the Petitioner for the F/Y 2023-24 after escalating the same at 5.25% per annum for arriving at the Estimated Insurance Expense for the year 2024-25, 2025-26, 2026-27, 2027-28 and 2028-29.

Capital Spare:

With regard to Capital Spares, the Petitioner has filed a separate Petition bearing No 45/MP/2024 for claiming the capital spares under Tariff Regulation, 2019 for 2019-24 period. Further, as per Tariff Regulations, 2024, Capital spares consumed and consequential Interest on Working Capital (IOWC) on the same shall be claimed by the Petitioner for 2024-29 period as per actual through a separate petition.

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

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

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

21. The application filing fee, expenses incurred on publication of Notices in Newspapers and License fee may be allowed to be recovered separately from the respondents in terms of Regulation 94(1) and Regulation 94(4) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024. The fees and charges to be paid by the petitioner as ISTS licensee (deemed ISTS licensee) under CERC (Fees and Charges of RLDC and other matters) Regulations, 2023 as amended from time to time shall also be recoverable from the DICs as provided under clause 94(3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.



22. The Transmission Charges and other related Charges indicated at para 12 & 13 above, is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, filing fees, license fee, RLDC fees and charges or any other kind of imposition (s) and/ or other surcharges etc. whatsoever imposed / charged by any Government (Central/State) and / or any other local bodies/authorities/regulatory authorities in relation to transmission of electricity, environmental protection, and/or in respect of any of its installation associated with the Transmission System and the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged, billed separately by the petitioner on the respondents.

23. **Sharing of Transmission Charges**

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

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

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

A. **PRAYER**

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



- a) Approve the trued-up Transmission Tariff for 2019-24 block and transmission tariff for 2024-29 block for the asset covered under this petition, as per para 12 and 13 above.
- b) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulations, 2019 and Tariff Regulations, 2024 as per para 12 and 13 above for respective block.
- c) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 94 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, and other expenditure (if any) in relation to the filing of petition.
- d) Allow the petitioner to bill and recover RLDC fees & charges and Licensee fee, separately from the respondents in terms of Regulation 94 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.
- e) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2024-29 period, if any, from the respondents.
- f) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 19 above.
- g) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall insurance expenses and consequential IOWC on that insurance expenses as mentioned at para 19 above.
- h) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall capital spares at the end of tariff block as per actual as mentioned at Para 19 above.



- i) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition as mentioned at para 20 above.
- j) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

GURGAON

DATED:- 29.07.2024

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

REPRESENTED BY

(V.C. Sekhar)

Sr. General Manager (Regulatory Cell)



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

PETITION NO.:

IN THE MATTER OF: Petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for assets under “**System Strengthening Scheme in Singrauli-Vindhyachal corridor in the Northern Region**” under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

Power Grid Corporation of India Ltd.

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

--- **PETITIONER**

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

Uttar Pradesh Power Corporation Ltd.

----- **RESPONDENT(S)**

Shakti Bhawan, 14, Ashok Marg

Lucknow - 226 001

Represented by Its Chairman

And others

AFFIDAVIT VERIFYING THE PETITION

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

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



24



2. That the accompanying Petition under Section 62 of the Electricity Act, 2003, has been filed by my authorized representative/nominated counsel under my instruction and the contents of the same are true and correct to the best of my knowledge and belief.
3. That the contents of Para 01 to 24 of the facts as mentioned in the Petition are true and correct based on my personal knowledge, belief and records maintained in the office and the contents of Para 01 to 24 of the Petition are believed to be true on the basis of the legal advice received.
4. That the annexures annexed to the Petition are correct and true copies of the respective originals.
5. That the Deponent has not filed any other Petition or Appeal before any other forum or court of law with respect to the subject matter of the dispute


(DEPONENT)

VERIFICATION

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


(DEPONENT)



ATTESTED
25
MAHENDER S. PUNIA
ADVOCATE & NOTARY
Distt. Gurugram (Haryana) India



पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
केन्द्रीय वाणिज्यिक विभाग

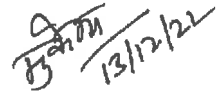
Ref: CC/Commercial/2022

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


Mukesh Khanna
ED (Commercial &RC)



CENTRAL ELECTRICITY REGULATORY COMMISSION**NEW DELHI****PETITION NO. 474/TT/2019****Coram:**

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

Date of order: 20.4.2021**In the matter of:**

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and revision of transmission tariff for the 2004-09 period, the 2009-14 period and truing up of transmission tariff of 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for 400 kV Vindhyachal-Kanpur line at Singrauli along with bays at Singrauli end (Realignment of Vindhyachal-Kanpur S/C line at Singrauli and Singrauli-Vindhyachal 2nd 400 kV Ckt) and Bus coupler bay at Vindhyachal HVDC under "System Strengthening Scheme in Singrauli-Vindhyachal corridor in the Northern Region".

And in the matter of:

Power Grid Corporation of India Ltd.
 SAUDAMINI, Plot No-2,
 Sector-29, Gurgaon-122 001 (Haryana).

.....Petitioner**Vs.**

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,
Vidyut bhawan, Vidyut marg,
Jaipur-302005.
2. Ajmer Vidyut Vitran Nigam Ltd.,
132 kV, GSS RVPNL Sub- station building,
Caligiri road, Malviya nagar,
Jaipur-302017 (Rajasthan).

ATTESTED TRUE COPY
Pujari 27/4/21
 Authorised Signatory
 Power Grid Corporation of India Ltd.
 Plot No. 2, Sector-29, Gurgaon-122001 (Haryana)



Order in Petition No.474/TT/2019



3. Jaipur Vidyut Vitran Nigam Ltd.,
132 kV, GSS RVPNL Sub- station building,
Caligiri road, Malviya nagar,
Jaipur-302017 (Rajasthan).
4. Jodhpur Vidyut Vitran Nigam Ltd.,
132 kV, GSS RVPNL Sub- station building,
Caligiri road, Malviya nagar,
Jaipur-302017 (Rajasthan).
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan,
Kumar House Complex Building II,
Shimla-171004.
6. Punjab State Electricity Board,
The mall, Patiala - 147 001.
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana) -134109.
8. Power Development Deptt.,
Govt. of Jammu & Kashmir,
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Ltd.,
(Formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg,
Lucknow - 226001,
10. Delhi Transco Ltd.,
Shakti Sadan, Kotla Road,
New Delhi-110002,
11. BSES Yamuna Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
12. BSES Rajdhani Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
13. Tata Power Delhi Distribution Ltd.,
33 kV Substation Building,



Hudson lane, Kingsway Camp,
North Delhi – 110009.

14. Chandigarh Administration,
Sector -9, Chandigarh.
15. Uttarakhand Power Corporation Ltd.,
Urja Bhawan, Kanwali Road,
Dehradun.
16. North Central Railway,
Allahabad.
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002

...Respondent(s)

Parties present:

For Petitioner: Shri S.S. Raju, PGCIL
Shri B.Dash, PGCIL
Shri Ved Rastogi, PGCIL
Shri A.K. Verma, PGCIL

For Respondent: Shri R.B. Sharma, Advocate, BRPL
Shri Mohit Mudgal, Advocate, BYPL
Ms. Megha Bajpayee, BRPL
Mr Sachin Dubey, BYPL

ORDER

The instant petition has been filed by the Petitioner, Power Grid Corporation of India Limited (PGCIL) for revision of transmission tariff for 2004-09 period, 2009-14 tariff period and trueing-up of the capital expenditure for the period from 1.4.2014 to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and for determination of tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred



Order in Petition No.474/TT/2019



to as "the 2019 Tariff Regulations") of the period from 1.4.2019 to 31.3.2024 in respect of the following assets:

400 kV Vindhyachal-Kanpur line at Singrauli along with bays at Singrauli end (Realignment of Vindhyachal-Kanpur S/C line at Singrauli and Singrauli-Vindhyachal 2nd 400 kV Ckt) and Bus coupler bay at Vindhyachal HVDC (hereinafter referred to as "the transmission asset") under System Strengthening Scheme in Singrauli-Vindhyachal corridor in the Northern Region (hereinafter referred to as "the transmission project").

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

"1) Approve the revised Transmission Tariff for 2004-09 block and transmission tariff for 2009-14 block for the assets covered under this petition, as per para 8 above.

2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 9 and 10 above.

3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff regulations 2014 and tariff regulation'19 as per para 9.0 & 10 above for respective block.

Further it is submitted that deferred tax liability before 01.04.2009 shall be recoverable from the beneficiaries or long term customers / DIC as the case may be, as and when the same is materialized as per regulation 49 of 2014 and regulation 67 of 2019 tariff regulation. The petitioner may be allow to recover the deferred tax liability materialised directly without making any application before the commission as provided in the regulation.

4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.

5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.



7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 10.5 above.

8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.

9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is withdrawn from negative list at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

Background

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

a) The Investment Approval (IA) for the transmission project was accorded by the Board of Directors vide Memorandum dated 25.2.2004 at an estimated cost of ₹1726.00 lakh including IDC of ₹106.00 lakh. As per this approval, the transmission project was to be completed by August 2006. Subsequently, the Revised Cost Estimates (RCE) for the transmission project was approved by the Board of Directors vide its letter dated 26.2.2008 for an estimated cost of ₹2179.00 lakh including IDC of ₹66.00 lakh.

b) The scope of work covered under the transmission project is broadly as follows:

Transmission lines:

- (i) LILO of 400 kV Vindhyachal-Kanpur line at Singrauli (S/C 1.006 KM)
- (ii) LILO of 400 kV Vindhyachal-Kanpur line at Singrauli (D/C 1.901 KM)

Substations:

- (iii) 2 Number of 400 kV bays at Singrauli.

c) The dates of commercial operation and time over-run of the transmission asset under the transmission project covered in the instant petition are as under:

Scheduled date of commercial operation (SCOD)	Date of commercial operation (COD)	Time over-run	Time over-run condoned
1.8.2006	1.5.2007	8 months	8 months



d) The transmission tariff for the period from 1.5.2007 (COD) to 31.3.2009 was approved vide order dated 29.4.2009 in Petition No. 124/2008 and time over-run of 8 months was also condoned in the same order. The transmission tariff was revised vide order dated 12.1.2010 in Petition No. 273/2009 on account of Additional Capital Expenditure (ACE) of ₹115.32 lakh incurred during 1.4.2008 to 31.3.2009.

e) The transmission tariff for the period from 1.4.2009 to 31.3.2014 was approved vide order dated 14.1.2011 in Petition No. 201/2010. The transmission tariff for the 2009-14 period was trued up and tariff for the period from 1.4.2014 to 31.3.2019 was determined vide order dated 26.11.2015 in Petition No. 197/TT/2014.

f) The Petitioner has sought revision of transmission tariff approved for the 2004-09 period on account of change in Interest on Loan (IoL) and Interest on Working Capital (IWC) to the extent of revision in IoL and in Maintenance Spares in terms of judgements of the Appellate Tribunal for Electricity (APTEL) dated 22.1.2007 and 13.6.2007 in Appeal No. 81/2005 and 139/2006 respectively. The Petitioner has sought consequential revision of tariff allowed for the 2009-14 period, truing up of tariff of 2014-19 period and determination of tariff for 2019-24 period for transmission system associated with the System Strengthening Scheme in Singrauli-Vindhyachal corridor in the Northern Region.

g) APTEL, vide judgements dated 22.1.2007 in Appeal No. 81/2005 and other related Appeals, and judgement dated 13.6.2007 in Appeal No. 139/2006 pertaining to generating stations of NTPC decided on, mainly, the following issues:

- (a) Computation of interest on loan,
- (b) Consequences of refinancing of loan,
- (c) Depreciation as deemed repayment,
- (d) Admissibility of depreciation up to 90% of the value of the assets,
- (e) Consideration of maintenance of spares for working capital,
- (f) Depreciation of assets.

h) The Commission and certain beneficiaries filed appeals against the APTEL's judgments before the Hon'ble Supreme Court in 2007. The appeals



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

i) Based on APTEL's judgments dated 22.1.2007 in Appeal No.81/2005 and dated 13.6.2007 in Appeal No. 139/2006, the Petitioner sought re-determination of tariff of its transmission asset for the periods 2001-04 and 2004-09 in Petition No. 121/2007. The Commission after taking into consideration the pendency of appeals before the Hon'ble Supreme Court adjourned the matter sine die and directed to revive the same after the disposal of the Civil Appeals by the Hon'ble Supreme Court.

j) The Hon'ble Supreme Court dismissed the said Civil Appeals filed against the APTEL's said judgments vide its judgment dated 10.4.2018 in Civil Appeal No. 5622 of 2007 along with other Civil Appeals.

k) Consequent to the Hon'ble Supreme Court's judgment dated 10.4.2018 in NTPC matter, the Petition No. 121/2007 was listed for hearing on 8.1.2019. The Commission, vide order dated 18.1.2019 in Petition No. 121/2007, directed the Petitioner to submit its claim separately for the asset at the time of filing of truing up of the petitions for the period 2014-19 in respect of concerned transmission asset.

l) The petition was heard on 10.3.2021 and in view of APTEL's judgments dated 22.1.2007 in Appeal No.81/2005 and dated 13.6.2007 in Appeal No. 139/2006 and the judgement of Hon'ble Supreme Court dated 10.4.2018 in Civil Appeal No. 5622 of 2007 along with other Civil Appeals, tariff is being revised. Although period-wise tariff is being re-worked based on the Tariff Regulations applicable for the respective tariff periods, suitable assumptions at certain places, if any, are being applied which are being indicated.

m) The capital cost of ₹1774.53 lakh as on COD for the transmission asset was approved by the Commission vide its order dated 29.4.2009 in Petition no. 124/2008. Also, considering ACE from 1.4.2008 to 31.3.2009 of ₹115.32 lakh,



the capital cost approved by the Commission vide its order dated 12.1.2010 in Petition No. 273/2009 is ₹1889.85 lakh as on 31.3.2009. Accordingly, tariff is being revised for the 2004-09 and 2009-14 tariff periods in terms of the APTEL's judgement dated 22.1.2007 in Appeal No.81/2005 and 13.6.2007 in Appeal No. 139/2006.

4. The Respondents are distribution licensees and power departments, which are procuring transmission service from the Petitioner, mainly beneficiaries of the Northern Region.

5. The Petitioner has served the petition on the Respondents and notice of this petition has been published in newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner.

6. Respondent No. 9, UPPCL has filed a reply to the petition vide affidavit dated 6.3.2020 in which issues of interest on loan and RoE have been raised. The Petitioner, vide affidavit dated 8.3.2021, has filed rejoinder to the reply of UPPCL. The issues raised by UPPCL and the clarifications given by the Petitioner are considered in the relevant portions of this order.

7. Learned counsel for BRPL has submitted that it has not filed reply to this petition but has requested that his arguments advanced in Petition No. 416/TT/2019 during the hearing conducted on 10.3.2021 may be considered. The Learned counsel in Petition No. 416/TT/2019 had submitted as under:

"a. The tariff trued up for the tariff period 2009-14 is not in accordance with Regulation 6(1) of the 2009 Tariff Regulations. The claim for grossing up of RoE can be allowed on submission of documents by the Petitioner clearly indicating the payment of tax on its transmission business. In response to an RTI application of certain electricity consumer



from Delhi whose details are given in Annexure-1 to the reply of BRPL in Petition No. 416/TT/2019, it was informed by the Petitioner that the Petitioner did not pay any tax to Income Tax Authorities during 2009-14 and 2014-19 tariff periods. The Petitioner has not carried out truing up of the grossed-up rate of RoE on annual basis despite it being a statutory requirement.

Form-3 submitted by the Petitioner indicates the effective tax rate on transmission business as nil. The Petitioner is entitled and is claiming tax benefits of higher depreciation during initial period under Income Tax Act, 1961 and is also availing the benefits of the Tax Holiday as per Section 80IA of the Income Tax Act, 1961. Such benefits under Income Tax Act, 1961 are permissible only in respect of its core services related to transmission business and not otherwise.

b. Form 3 submitted in its present form does not permit grossing up of RoE for truing up period. The Petitioner has claimed grossing up of RoE in various petitions including Petition No. 24/TT/2020 without placing on record the documents relating to actual tax paid. It is obligatory for the Petitioner to place on record region-wise corporate audited balance sheet, profit and loss accounts with all schedules and annexures of new Transmission System & Communication System for the relevant years as it is a statutory requirement.

c. The Petitioner has opted for deemed cost exemption as per para D7 AA of IND AS 101 'First Time Adoption' of Indian Accounting Standard. Indian Accounting Standards is for the purposes of Companies Act, 2013 and not for the purposes of the 2014 Tariff Regulations or 2019 Tariff Regulations. Adoption of Indian Accounting Standards is increasing the tariff."

8. As regards submissions of BRPL relating to IND AS, this issue has been dealt with earlier in Petition No. 136/TT/2020 vide order dated 24.01.2021. The relevant extract of the order is as under:

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

9. As regards submissions of BRPL on the issue of tax, the issue has also been dealt with in the aforesaid order, relevant extract of which is as under:

"52. We have considered the contentions of BRPL and UPPCL and the clarifications given by the Petitioner. BRPL has contended that details of the income tax submitted by the Petitioner are in respect of the Petitioner's company as a whole and it does not



pertain to the transmission business in Northern Region. The Petitioner has clarified that every registered company has only one single PAN and it has to file one single return and the Petitioner cannot file income tax separately for each region. BRPL has contended that as per the information available in public domain, the Petitioner has to pay the effective tax rate for 2014-15 @8.70% and for the period 2015-19, it is zero and that the excess recovery made by the Petitioner should be returned to the beneficiaries along with simple interest as provided in Regulation 6 of the 2009 Tariff Regulations. The Petitioner has clarified that the effective tax rate was shown as zero for the period 2015-19 inadvertently due to technical reasons and the Petitioner has paid income tax for the said period. The Petitioner has also clarified that as per the provisions of the 1961 Act, tax has to be computed under normal provisions of Income Tax Rules, 1962 and as per MAT provisions under the section 115JB of the 1961 Act and the assessee will have to pay tax higher of the two. As per the submission, during the tariff period 2014-19, the Petitioner calculated the income tax under regular provisions of the 1961 Act (with tax rates of 33.99% to 34.944%) and the tax was worked out to be lower than the tax payable under MAT rates due to deductions under section 80IA and availability of accelerated depreciation under Income Tax. Thus, the Petitioner has been assessed and paid tax under MAT. We are satisfied with the clarifications given by the Petitioner and convinced that the Petitioner has acted prudently and has complied with the provisions of the 1961 Act and the provisions of the tariff regulations.

53. As regards UPPCL's contention that the grossed up rate of RoE for the period 2016-17 to 2018-19 is not based on the MAT rates approved by the Income Tax Authorities, it is observed that the effective rate of tax considered by the Petitioner for 2014-15, 2015-16 and 2016-17 are based on Assessment Orders issued by Income Tax authorities and the effective rate of tax considered for 2017-18 and 2018-19 are based on the Income Tax returns filed for the purpose of grossing up the RoE rate of respective years. In view of the clarification given by the Petitioner, we are of the view that there is no merit in the contention of UPPCL."

10. We notice that the counsel of BRPL has been raising the same issues in petitions even though they have been dealt with in earlier orders of the Commission.

11. This order is issued considering the submissions made by the Petitioner vide affidavit dated 27.9.2019 and 22.7.2020, reply of UPPCL vide affidavit dated 6.3.2020 and Petitioner's rejoinder to the reply vide affidavit dated 8.3.2021.

12. The hearing in this matter was held on 10.3.2021 through video conference and the order was reserved.

13. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.



14. The Petitioner has sought revision of the computation of the interest on loan, maintenance spares for working capital and depreciation allowed for the 2004-09 period on the basis of APTEL's judgements dated 22.1.2007 in Appeal No. 81 of 2005 and dated 13.6.2007 in Appeal No.139/2006. APTEL while dealing with the issue of computation of interest on loan, in judgement dated 22.1.2007 in Appeal No.81/2005, observed that loL for the period from 1.4.1998 to 31.3.2001 shall be computed only on normative loan repayment as per its judgement dated 14.11.2006 in Appeal No. 94 and Appeal No.96 of 2005. APTEL vide its judgement dated 14.11.2006 in Appeal No. 94 and Appeal No.96 of 2005 set aside the Commission's methodology of computation of loan on the actual repayment basis or normative repayment whichever is higher and held that the Commission is required to adopt normative debt repayment methodology for working out the loL liability for the period 1.4.1998 to 31.3.2001. The relevant portions of the judgement of 14.11.2006 in Appeal No. 94 and Appeal No.96 of 2005 is as under:

- "12. We have heard the arguments of the Senior Counsel(s) of appellant and respondents. We notice that the appellant has not challenged the formula for computing the annual repayment amount as provided in Appeal No. 96 of 2005 & IA No.117 of 2006 in Appeal No. 94 of 2005 para-22 of the impugned order and has only challenged the provisions at para 23 specifying that the amount of annual repayment for calculation of interest on loan is chosen higher of the normative debt and actual debt.*
- 13. As mentioned earlier the servicing of the capital (equity or debt) is financed by the recovery of interest on debt capital and through earning of return on equity capital. The actual loan repayment has been normalized to 50% of the total capital by the formula in para 22 of the impugned order given in para 11 above. Once it has been decided and agreed that the financing plan would be based on normative debt-equity ratio of 50:50 and not the actual debt-equity ratio, the same normative basis should be adopted for recovery of cost of servicing the capital.*
- 14. In the instant case since the normative debt-equity ratio of 50:50 has been adopted in the financing plan, the loan repayment should be computed based on normative debt. This is to ensure that whatever normative debt has been considered, tariff should ensure the recovery of the same normative debt and interest thereon.*
- 18. In its Tariff Regulation of 2004 the Central Commission perhaps recognizing the aforesaid anomaly has dispensed with the practice of adopting higher of actual or normative repayment and has corrected the method of determination of quantum*



of debt repayment only on the basis of the normative debt with effect from 01.04.2004

19. *In view of the above, the Central Commission is required to adopt normative debt repayment methodology for working out the interest on loan liability for the period 01.04.1998 to 31.03.2001."*

In view of the above, the interest allowed for the 2004-09 periods is revised on the basis of the normative debt repayment methodology.

15. APTEL in judgement dated 13.6.2007 in Appeal No.139 of 2006 and others held that additional capitalisation after the date of commercial operation should also be considered for computation of maintenance spares as under:

"Analysis and Decision

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

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

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

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

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

It is clear from the abovementioned Clause 18 of the CERC Regulations that additional capitalization after the date of commercial operation is recognized as part of



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

16. In view of the above, the maintenance spares to be considered for computation of working capital for the 2004-09 period are also required to be revised taking into consideration the additional capitalisation after the date of commercial operation. We observe that in the instant petition, there has been additional capitalization of ₹190.26 lakh and ₹115.32 lakh after the date of commercial operation which has necessitated a revision in maintenance spares.

17. As regards depreciation, APTEL in its judgement dated 13.6.2007 in Appeal No.139 of 2006 observed that depreciation is an expense and it cannot be deployed for deemed repayment of loan and accordingly directed the Commission to compute the outstanding loan afresh. The relevant portion of the judgement is as under:

"Analysis and Decision

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

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

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



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

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

18. Accordingly, in view of the above directions of APTEL, the outstanding loan allowed for the transmission asset for the 2004-09 period is revised in the instant order.

19. The revision of tariff allowed for 2004-09 tariff period necessitates the revision of tariff allowed for the 2009-14 period, which is also allowed in the instant order. The implementation of the directions of APTEL in case of the Petitioner has been kept pending waiting for the outcome of the Civil Appeals filed before the Hon'ble Supreme Court. Taking into consideration the facts of the case and keeping in view the interest of the consumers, we are of the view that the beneficiaries should not be burdened with the carrying cost for the difference in the tariff allowed earlier and allowed in the instant order for the period 2004-09 and 2009-14 tariff periods. Therefore, the Petitioner will neither claim nor pay any carrying cost from the beneficiaries for the difference, if any, in the tariff allowed earlier and that allowed in the instant order. Further, the said difference in tariff shall be recovered/ paid over a period of six months from the date of issue of this order.

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

2004-09 Period

20. The Commission in orders dated 29.4.2009 in Petition No. 124/2008 and dated 12.1.2010 in Petition No. 273/2009 had approved the following transmission charges for the transmission asset for the 2004-09 period:



Order in Petition No.474/TT/2019



Particulars	(₹ in lakh)	
	2007-08 (pro-rata 11 months)	2008-09
Depreciation	54.11	64.41
Interest on Loan	86.49	101.52
Return on Equity	64.66	76.95
Advance against Depreciation	-	-
Interest on Working Capital	8.85	10.28
O&M Expenses	88.11	99.98
Total	302.21	353.14

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

Particulars	(₹ in lakh)	
	2007-08 (pro-rata 11 months)	2008-09
Depreciation	54.11	64.41
Interest on Loan	88.53	108.85
Return on Equity	64.66	76.95
Advance against Depreciation	-	-
Interest on Working Capital	9.00	10.76
O&M Expenses	88.11	99.98
Total	304.41	360.95

22. UPPCL has submitted that IOL claimed by the Petitioner does not match with IOL as admitted by the Commission. UPPCL has further submitted that the rate of interest considered by the Petitioner is not justified and that clarification is not provided for the difference in interest on loan claimed. In response, the Petitioner has submitted that weighted average rate of interest has been considered as allowed by the Commission vide order dated 29.4.2009 in Petition No. 124/2008 and order dated 12.1.2010 in Petition No. 273/2009.

23. The Commission vide order dated 12.1.2010 in Petition No. 273/2009 held as under:

"In our calculation, the interest on loan has been worked out as detailed below:

(a) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual have been considered as per the order dated 29.4.2009 in Petition No. 124/2008. There is addition of actual loan during 2008-09 by way of Bond XXIX and Bond XXVIII, which has been considered.



(b) Notional loan arising out of additional capitalization for the year 2008-09 has been added in loan amount as on date of commercial operation to arrive at total notional loan. This adjusted gross loan has been considered as normative loan for tariff calculations.

(c) Tariff has been worked out considering normative loan and normative repayments. Normative repayments have been worked out by the following formula:

(d) Moratorium in repayment of loan has been considered with reference to normative loan and if the normative repayment of loan during the year is less than the depreciation during the year, it has been considered as moratorium and depreciation during the year has been deemed as normative repayment of loan during the year.

(e) Weighted average rate of interest on actual loan worked out as per (i) above has been applied on the average loan during the year to arrive at the interest on loan.

(f) Short term bridge loan from Bank of Baroda has been replaced by Bond XXVIII and weighted average rate of interest, based on number of days has been calculated. Details of Bank of Baroda have been taken as per the petition."

24. In terms of the above order, the contention of UPPCL is rejected. The tariff is allowed for the transmission asset on the basis of the following:

a) Admitted capital cost of ₹1584.27 lakh for the transmission asset as on 1.5.2007.

b) With respect to calculation of IoL, Regulation 56(i)(f) of the 2004 Tariff Regulations provide as under:

"56 (i) Interest on Loan Capital

(f) In case any moratorium period is availed of by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly;"

Accordingly, moratorium in repayment of loan has been considered as per the Regulations applicable for the 2004-09 tariff period.

c) Weighted Average Rate of Depreciation, Rate of Interest for Working Capital and O&M Expenses as per orders dated 29.4.2009 in Petition No. 124/2008 and dated 12.1.2010 in Petition No. 273/2009 respectively.

25. There was ACE of ₹190.26 lakh from COD to 31.3.2007 and of ₹115.32 lakh during 2008-09. Accordingly, the maintenance spares component is revised for calculating IWC.

26. In view of the above, the revised transmission charges allowed for the transmission asset for the 2004-09 tariff period is as under:



(₹ in lakh)		
Particulars	2007-08 (pro-rata 11 months)	2008-09
Depreciation	54.11	64.41
Interest on Loan	86.49	101.52
Return on Equity	64.66	76.95
Advance against Depreciation	-	-
Interest on Working Capital	8.96	10.60
O&M Expenses	88.11	99.98
Total	302.33	353.46

27. AFC allowed earlier for 2004-09 period vide orders dated 29.4.2009 in Petition No. 124/2008 and dated 12.1.2010 in Petition No. 273/2009, the revised AFC claimed in the petition and AFC allowed in the instant order is given below:

(₹ in lakh)		
Particulars	2007-08 (pro-rata 11 months)	2008-09
AFC approved vide orders dated 29.4.2009 in Petition No. 124/2008 and 12.1.2010 in Petition No. 273/2009	302.21	353.14
AFC claimed by the Petitioner in the petition	304.41	360.95
AFC allowed in the instant order	302.33	353.46

2009-14 Period

28. The Commission vide order dated 14.1.2011 in Petition No. 201/2010 had approved the tariff for the transmission asset for the 2009-14 period and in order dated 26.11.2015 in Petition No 197/TT/2014 had trued up the tariff allowed for the 2009-14 period that was earlier allowed in order dated 14.1.2011 and the same is as follows:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	100.49	100.49	100.49	100.49	100.49
Interest on Loan	98.47	90.49	82.26	73.84	65.40
Return on Equity	105.87	109.75	109.86	109.86	111.18
Interest on Working Capital	11.67	11.89	12.04	12.21	12.42
O&M Expenses	106.35	112.44	118.88	125.67	132.86
Total	422.85	425.06	423.52	422.07	422.36



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

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	100.49	100.49	100.49	100.49	100.49
Interest on Loan	108.58	100.67	92.48	84.10	75.71
Return on Equity	105.87	109.75	109.86	109.86	111.18
Interest on Working Capital	11.88	12.10	12.26	12.42	12.64
O&M Expenses	106.35	112.44	118.88	125.67	132.86
Total	433.17	435.45	433.97	432.55	432.88

30. UPPCL has submitted that the rate of interest considered by the Petitioner is not justified. In response, the Petitioner has submitted that rate of interest has been considered as allowed by the Commission vide order dated 26.11.2015 in Petition No. 197/TT/2014. The Petitioner has further submitted that the cumulative depreciation may be referred from tariff calculations enclosed as part of the petition.

31. The Commission vide order dated 26.11.2015 in Petition No. 197/TT/2014 held as under:

“16. It is observed that the debt funding in the instant case is through bonds which bear a fixed interest rate. Therefore in accordance with the provisions of Regulation 16 of the 2009 Tariff Regulations, weighted average rate of interest on actual loan portfolio has been worked out. Detailed calculation in support of the weighted average rate of interest has been given in Annexure-I to this order.”

32. We have considered the submissions of the Petitioner and UPPCL. The tariff is allowed for the transmission asset on the basis of the following:

- Admitted capital cost of ₹1889.85 lakh as on 1.4.2009.
- Weighted Average Rate of Interest on actual loan derived/ adopted from order dated 26.11.2015 in Petition No 197/TT/2014.
- Weighted Average Rate of Depreciation as per order dated 26.11.2015 in Petition No 197/TT/2014.
- There was no ACE during the 2009-14 period.

33. In view of the above, the revised transmission charges allowed for the transmission asset for the 2009-14 tariff period is as under:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	100.49	100.49	100.49	100.49	100.49
Interest on Loan	98.47	90.49	82.26	73.84	65.41
Return on Equity	105.87	109.75	109.86	109.86	111.18
Interest on Working Capital	11.67	11.89	12.05	12.21	12.42
O&M Expenses	106.35	112.44	118.88	125.67	132.86
Total	422.85	425.06	423.53	422.06	422.35

34. AFC allowed earlier for 2009-14 period vide order dated 26.11.2015 in Petition No. 197/TT/2014, the revised AFC claimed in the instant petition and AFC allowed in the instant order are shown as under:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
AFC approved vide order dated 26.11.2015 in Petition No. 197/TT/2014	422.85	425.06	423.52	422.07	422.36
AFC claimed by the Petitioner in the petition	433.17	435.45	433.97	432.55	432.88
AFC allowed in the instant order	422.85	425.06	423.53	422.06	422.35

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

35. The details of the transmission charges claimed by the Petitioner in respect of the transmission asset is as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	100.50	100.50	100.50	100.50	100.50
Interest on Loan	67.34	58.99	50.68	42.47	34.46
Return on Equity	111.26	111.77	111.72	111.72	112.02
Interest on Working Capital	13.18	13.23	13.27	13.32	13.39
O&M Expenses	122.35	126.41	130.61	134.95	139.41
Total	414.63	410.90	406.78	402.96	399.78

36. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission asset are as under:

(₹ in lakh)					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	10.20	10.53	10.88	11.25	11.62
Maintenance Spares	18.35	18.96	19.59	20.24	20.91
Receivables	69.11	68.48	67.80	67.16	66.63
Total Working Capital	97.66	97.97	98.27	98.65	99.16
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	13.18	13.23	13.27	13.32	13.39

Capital Cost

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

38. The Commission vide order dated 26.11.2015 in Petition No. 197/TT/2014 had allowed capital cost of ₹1889.85 lakh as on 1.4.2014 and capital cost of ₹1889.85 lakh as on 1.4.2019. The capital cost allowed for determination of tariff for the 2014-19 period for transmission asset covered under instant petition as shown under:

(₹ in lakh)		
Admitted Capital Cost as on 31.3.2014	Admitted ACE during 2014-19	Admitted Capital Cost as on 31.3.2019
1889.85	0.00	1889.85

Additional Capital Expenditure (ACE)

39. The Petitioner has claimed nil ACE for the 2014-19 period.

Debt-Equity ratio

40. The debt-equity ratio has been allowed in accordance with Regulation 19(3) of the 2014 Tariff Regulations. Accordingly, the debt-equity ratio of 70:30 for the period ending on 31.3.2014 has been considered for the purpose of determination of tariff and truing up of the tariff of the transmission asset for the 2014-19 tariff period. The details of the debt-equity ratio as on 1.4.2014 and 31.3.2019 of the transmission asset is as under:



Funding	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	1322.91	70.00	1322.91	70.00
Equity	566.94	30.00	566.94	30.00
Total	1889.85	100.00	1889.85	100.00

Depreciation

41. UPPCL has submitted that the depreciation considered by the Petitioner is inconsistent as compared to the depreciation worked out by the Respondent. In response, the Petitioner has submitted that depreciation has been computed as per the 2014 Tariff Regulations.

42. The submissions of the Petitioner and UPPCL have been considered. The Gross Block during the tariff period 2014-19 has been depreciated at weighted average of depreciation (WAROD). WAROD at Annexure-1 has been worked out after taking into account the depreciation rates of the transmission asset as specified in the 2014 Tariff Regulations and depreciation allowed is as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	1889.85	1889.85	1889.85	1889.85	1889.85
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	1889.85	1889.85	1889.85	1889.85	1889.85
Average Gross Block	1889.85	1889.85	1889.85	1889.85	1889.85
Weighted average rate of Depreciation (WAROD) (%)	5.32	5.32	5.32	5.32	5.32
Balance useful life of the asset (Year)	21	20	19	18	17
Elapsed life of the asset (Year)	6	7	8	9	10
Depreciable Value	1700.87	1700.87	1700.87	1700.87	1700.87
Depreciation during the year	100.49	100.49	100.49	100.49	100.49
Cumulative Depreciation	721.46	821.96	922.45	1022.94	1123.44
Remaining Depreciable Value	979.40	878.91	778.41	677.92	577.43



43. The details of depreciation approved earlier vide order dated 26.11.2015 in Petition No. 197/TT/2014, depreciation claimed by the Petitioner and as trued up in the instant order are shown in the table below:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.11.2015 in Petition No. 197/TT/2014	100.49	100.49	100.49	100.49	100.49
Claimed by the Petitioner in the petition	100.50	100.50	100.50	100.50	100.50
Allowed after true-up in this order	100.49	100.49	100.49	100.49	100.49

Interest on Loan (IoL)

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

45. UPPCL has submitted that IoL should be claimed based on approved figures of cumulative repayment of loan. In response, the Petitioner vide affidavit dated 8.3.2021 has submitted that the cumulative repayment of loan as on 1.4.2014 is considered and IoL has been calculated considering repayment of loan in accordance with the 2014 Tariff Regulations. The detailed calculation has been provided in Revised Tariff Computation form enclosed with the Petition.

46. We have considered the submissions of the Petitioner and UPPCL. IoL has been calculated based on actual interest rate submitted by the Petitioner in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL allowed in respect of the transmission asset is as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan					
Gross Normative Loan	1322.90	1322.90	1322.90	1322.90	1322.90
Cumulative Repayments up to Previous Year	620.97	721.46	821.96	922.45	1022.94



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Net Loan-Opening	701.93	601.43	500.94	400.44	299.95
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	100.49	100.49	100.49	100.49	100.49
Net Loan-Closing	601.43	500.94	400.44	299.95	199.46
Average Loan	651.68	551.18	450.69	350.20	249.70
Weighted Average Rate of Interest on Loan (%)	8.7425	8.8078	8.9041	9.0604	9.3584
Interest on Loan	56.97	48.55	40.13	31.73	23.37

47. The details of IoL approved vide earlier order dated 26.11.2015 in Petition No. 197/TT/2014, IoL claimed by the Petitioner in the petition and as trued up in the instant order are shown in the table below:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.11.2015 in Petition No 197/TT/2014	56.97	48.55	40.13	31.73	23.37
Claimed by the Petitioner in the petition	67.34	58.99	50.68	42.47	34.46
Allowed after true-up in this order	56.97	48.55	40.13	31.73	23.37

Return on Equity (RoE)

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

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

49. UPPCL has submitted that the grossed up rates of Return on Equity for the period 2016-17 to 2019-20 have been calculated on the basis of presumptive MAT rates which have not been approved by I.T. Authorities. UPPCL has further submitted



that the petitioner should be directed to resubmit the calculation of equity and rate of RoE for 2016-19 on the basis of MAT rates approved by the Income Tax Authorities.

50. In response, the Petitioner has submitted that the effective rate of tax considered for 2014-15, 2015-16 and 2016-17 are based on Assessment Orders issued by the Income Tax authorities for the purpose of grossing up of RoE rate. Further, the effective rate of tax considered for 2017-18 and 2018-19 are based on the Income Tax returns filed, for the purpose of grossing up of RoE rate of respective years. Further, the Petitioner has submitted that so far it has been granted trued-up tariff of the 2014-19 period by the Commission vide orders dated 18.4.2020 in Petition No. 247/TT/2019, dated 23.4.2020 in Petition No. 245/TT/2019 and dated 16.4.2020 in Petition No. 307/TT/2019 for transmission asset under the respective petitions, where effective tax rate based (for the 2014-19 tariff period) on notified MAT rates are considered for the purpose of grossing-up of rate of return on equity (RoE). Accordingly, the tariff for each year of the 2014-19 tariff period is being determined by the Commission considering the effective tax percentage to arrive at grossed up return of equity (RoE). The Petitioner has further submitted that the grossed up RoE (in %) and effective tax rate for the 2014-19 tariff period has already been determined by the Commission. The Petitioner has requested to allow 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 years 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 on receipt of the respective assessment orders, directly from the beneficiaries, on year to year basis as provided under the Regulations

51. We have considered the submissions of the Petitioner and Respondents, UPPCL and BRPL (through oral submissions). The Commission vide order dated



24.1.2021 in Petition No. 136/TT/2020 has already dealt with the concerns of the Respondents. The relevant paragraphs of the order are extracted as under:

"52. We have considered the contentions of BRPL and UPPCL and the clarifications given by the Petitioner. BRPL has contended that details of the income tax submitted by the Petitioner are in respect of the Petitioner's company as a whole and it does not pertain to the transmission business in Northern Region. The Petitioner has clarified that every registered company has only one single PAN and it has to file one single return and the Petitioner cannot file income tax separately for each region. BRPL has contended that as per the information available in public domain, the Petitioner has to pay the effective tax rate for 2014-15 @8.70% and for the period 2015-19, it is zero and that the excess recovery made by the Petitioner should be returned to the beneficiaries along with simple interest as provided in Regulation 6 of the 2009 Tariff Regulations. The Petitioner has clarified that the effective tax rate was shown as zero for the period 2015-19 inadvertently due to technical reasons and the Petitioner has paid income tax for the said period. The Petitioner has also clarified that as per the provisions of the 1961 Act, tax has to be computed under normal provisions of Income Tax Rules, 1962 and as per MAT provisions under the section 115JB of the 1961 Act and the assessee will have to pay tax higher of the two. As per the submission, during the tariff period 2014-19, the Petitioner calculated the income tax under regular provisions of the 1961 Act (with tax rates of 33.99% to 34.944%) and the tax was worked out to be lower than the tax payable under MAT rates due to deductions under section 80IA and availability of accelerated depreciation under Income Tax. Thus, the Petitioner has been assessed and paid tax under MAT. We are satisfied with the clarifications given by the Petitioner and convinced that the Petitioner has acted prudently and has complied with the provisions of the 1961 Act and the provisions of the tariff regulations.

53. As regards UPPCL's contention that the grossed up rate of RoE for the period 2016-17 to 2018-19 is not based on the MAT rates approved by the Income Tax Authorities, it is observed that the effective rate of tax considered by the Petitioner for 2014-15, 2015-16 and 2016-17 are based on Assessment Orders issued by Income Tax authorities and the effective rate of tax considered for 2017-18 and 2018-19 are based on the Income Tax returns filed for the purpose of grossing up the RoE rate of respective years. In view of the clarification given by the Petitioner, we are of the view that there is no merit in the contention of UPPCL."

52. The Commission in order dated 27.4.2020 in Petition No.274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is given in the table below. The relevant portion of the order dated 27.4.2020 is as under:

"26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for



respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long-term transmission customers / DICs as the case may be on year to year basis.

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

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

53. The same MAT rates as above are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations which is as under:

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

54. The Petitioner has claimed RoE for the 2014-19 period after grossing up the RoE of 15.50% with Effective Tax rates (based on MAT rates) each year as per the above said Regulation. RoE is trued up on the basis of the MAT rate applicable in the respective years and is allowed for the transmission asset as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	566.96	566.96	566.96	566.96	566.96
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	566.96	566.96	566.96	566.96	566.96



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Average Equity	566.96	566.96	566.96	566.96	566.96
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity	111.18	111.72	111.72	111.72	112.02

55. The details of RoE approved vide order dated 26.11.2015 in Petition No. 197/TT/2014, RoE claimed by the Petitioner in the petition and as trued up in the instant order are shown in the table below:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.11.2015 in Petition No 197/TT/2014	111.18	111.18	111.18	111.18	111.18
Claimed by the Petitioner in the petition	111.26	111.77	111.72	111.72	112.02
Allowed after true-up in this order	111.18	111.72	111.72	111.72	112.02

Operation & Maintenance Expenses (O&M Expenses)

56. The O&M Expenses claimed by the Petitioner are as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station Bays 400 kV					
Singrauli-Rihand- I Bay	2 Number				
Singrauli- Kanpur Bay					
Norms (₹ lakh/bays)	60.30	62.30	64.37	66.51	68.71
O&M expenses (₹ in lakh)	120.60	124.60	128.74	133.02	137.42
Transmission lines					
D/C (Twin/Triple Conductor) (km)	1.901 km				
Norms (₹ lakh/bays)	0.707	0.731	0.755	0.78	0.806
O&M expenses (₹ in lakh)	1.34	1.39	1.44	1.48	1.53
S/C (Twin/Triple Conductor)	1.006 km				
Norms (₹ lakh/bays)	0.404	0.418	0.432	0.446	0.461
O&M expenses (₹ in lakh)	0.41	0.42	0.43	0.45	0.46
Total O&M expenses (₹ in lakh)	122.35	126.41	130.61	134.95	139.41

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

 Order in Petition No.474/TT/2019



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station Bays 400 kV					
Norms (₹ lakh/bays)	120.60	124.60	128.74	133.02	137.42
Transmission line					
D/C (Twin/Triple Conductor) (km)					
Norms (₹ lakh/bays)	1.34	1.39	1.44	1.48	1.53
S/C (Twin/Triple Conductor)					
Norms (₹ lakh/bays)	0.41	0.42	0.43	0.45	0.46
Total O&M expenses (₹ in lakh)	122.35	126.41	130.61	134.95	139.42

58. The details of O&M Expenses approved vide order dated 26.11.2015 in Petition No 197/TT/2014, O&M Expenses claimed by the Petitioner in the petition and as trued up in the instant order are shown in the table below:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.11.2015 in Petition No 197/TT/2014	122.35	126.41	130.61	134.95	139.42
Claimed by the Petitioner in the petition	122.35	126.41	130.61	134.95	139.41
Allowed after true-up in this order	122.35	126.41	130.61	134.95	139.42

Interest on Working Capital (IWC)

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

(i) Maintenance Spares:

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

(ii) O & M Expenses:

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



(iii) Receivables:

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

(iv) Rate of interest on working capital

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

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

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Working Capital					
O&M Expenses (O&M Expenses for 1 month)**	10.20	10.53	10.88	11.25	11.62
Maintenance Spares (Maintenance Spares @ 15% of O&M Expenses)**	18.35	18.96	19.59	20.24	20.91
Receivables (Receivables equivalent to 2 months of fixed cost)**	67.32	66.69	66.00	65.33	64.74
Total Working Capital	95.87	96.19	96.47	96.82	97.27
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	12.94	12.99	13.02	13.07	13.13

**As per the 2014 Tariff Regulations

61. The details of IWC approved earlier vide order dated 26.11.2015 in Petition No. 197/TT/2014, IWC claimed by the Petitioner in the petition and as trued up in the instant order are shown in the table below:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.11.2015 in Petition No 197/TT/2014	12.94	12.97	13.01	13.06	13.11
Claimed by the Petitioner in the petition	13.18	13.23	13.27	13.32	13.39
Allowed after true-up in this order	12.94	12.99	13.02	13.07	13.13



Approved Annual Fixed Charges for the 2014-19 Tariff Period

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

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	100.49	100.49	100.49	100.49	100.49
Interest on Loan	56.97	48.55	40.13	31.73	23.37
Return on Equity	111.18	111.72	111.72	111.72	112.02
Interest on Working Capital	12.94	12.99	13.02	13.07	13.13
O & M Expenses	122.35	126.41	130.61	134.95	139.42
Total	403.94	400.15	395.98	391.96	388.43

63. Accordingly, the Annual Transmission Charges as approved earlier vide order dated 26.11.2015 in Petition No. 197/TT/2014, as claimed by the Petitioner in the petition and as approved after truing up in the instant order are shown in the table below:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.11.2015 in Petition No 197/TT/2014	403.94	399.60	395.43	391.41	387.57
Claimed by the Petitioner in the petition	414.63	410.90	406.78	402.96	399.78
Allowed after true-up in this order	403.94	400.15	395.98	391.96	388.43

64. The Annual Transmission Charges for the transmission asset approved after truing up have increased in comparison to that approved earlier vide order dated 26.11.2015 in Petition No. 197/TT/2014 mainly due to consequential impact of IOL revision based on APTEL judgement dated 22.1.2007 and 13.6.2007 and grossing up of RoE based on actual tax rate.

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

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



Order in Petition No.474/TT/2019



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	100.50	31.79	31.79	31.79	31.80
Interest on Loan	25.82	19.47	16.48	13.38	9.80
Return on Equity	112.02	112.02	112.02	112.02	112.02
Interest on Working Capital	6.54	5.52	5.58	5.65	5.69
O&M Expenses	67.83	70.16	72.58	75.09	77.67
Total	312.71	238.96	238.45	237.93	236.98

66. The details of IWC claimed by the Petitioner for the 2019-24 period are as under:

(₹ in lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	5.65	5.85	6.05	6.26	6.47
Maintenance Spares	10.17	10.52	10.89	11.26	11.65
Receivables	38.45	29.46	29.40	29.33	29.14
Total Working Capital	54.27	45.83	46.34	46.85	47.26
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	6.54	5.52	5.58	5.65	5.69

Capital Cost

67. Regulation 19 of the 2019 Tariff Regulations provides as under:

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

(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 trued up by excluding liability, if any, as on 1.4.2019;
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
- (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”

(4) The capital cost in case of existing or new hydro generating station shall also include:

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.

“(5) The following shall be excluded from the capital cost of the existing and new projects:



- (a) The assets forming part of the project, but not in use, as declared in the tariff petition;
- (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

(c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;

(d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and

(e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”

68. The Petitioner has claimed capital cost of ₹1889.85 lakh as on 31.3.2019 for the transmission asset. 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.

Additional Capital Expenditure (ACE)

69. Regulation 24 of the 2019 Tariff Regulations provides as under:

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

(1) The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (a) Undischarged liabilities recognized to be payable at a future date;
- (b) Works deferred for execution;
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
- (e) Change in law or compliance of any existing law; and



(f) Force Majeure events:

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

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

70. The Petitioner has projected Nil ACE during the 2019-24 tariff period for the transmission asset.

71. Accordingly, the capital cost considered for the 2019-24 tariff period is as under:

(₹ in lakh)

Total Capital Cost as on 1.4.2019	ACE admitted for 2019-24	Total Capital Cost as on 31.3.2024
1889.85	0.00	1889.85

Debt-Equity ratio

72. Regulation 18 of the 2019 Tariff Regulations provides as under:

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

Provided that:

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

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



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

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

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

73. The details of debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period for the transmission asset is as under:

Particulars	Capital Cost as on 1.4.2019(₹ in lakh)	%	Capital Cost as on 31.3.2024(₹ in lakh)	%
Debt	1322.91	70.00	1322.91	70.00
Equity	566.94	30.00	566.94	30.00
Total	1889.85	100.00	1889.85	100.00

Depreciation

74. Regulations 33(1), (2) and (5) of the 2019 Tariff Regulations provide as under:

"33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the



tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

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

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of 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 or 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 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the 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."

75. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The transmission asset has completed 12 years of life as on 31.3.2020, the remaining depreciable value of ₹445.14 lakh as on 31.3.2020 has been spread across the balance useful life of 15 years in accordance with Regulation 27(5) of the 2014 Tariff Regulations and Regulation 33(5) of the 2019 Tariff Regulations. The annual depreciation from the year 2020-21 and onwards is ₹31.80 lakh. The weighted average rate of depreciation (WAROD) has been worked out (Annexure-2) as per the rates of depreciation prescribed in 2019 Tariff Regulations. The depreciation allowed for the transmission asset for the 2019-24 period is as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	1889.85	1889.85	1889.85	1889.85	1889.85
Projected ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	1889.85	1889.85	1889.85	1889.85	1889.85
Average Gross Block	1889.85	1889.85	1889.85	1889.85	1889.85
Weighted average rate of Depreciation (WAROD) (%)	5.32	Spreading			
Balance useful life at the beginning of the year (Year)	16	15	14	13	12



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Elapsed life of the asset (Year)	11	12	13	14	15
Depreciable Value	1700.87	1700.87	1700.87	1700.87	1700.87
Depreciation during the year	100.49	31.80	31.80	31.80	31.80
Cumulative Depreciation	1223.93	1255.73	1287.52	1319.32	1351.11
Remaining Aggregated Depreciable Value	476.93	445.14	413.34	381.55	349.75

Interest on Loan (IoL)

76. Regulation 32 of the 2019 Tariff Regulations provides as under:

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

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

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

(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.”*



77. UPPCL has submitted that the Petitioner should consider correct figures of cumulative repayments of normative loan and consequent figures of opening value of normative loan. In response, the Petitioner has submitted that IoL has been calculated in line with the 2019 Tariff Regulations. Accordingly, IoL has been calculated considering repayment of loan in line with the 2019 Tariff Regulations. Considering the same, the detailed calculation of gross normative loan-opening, cumulative repayment up to previous year and net normative loan-opening for respective years is provided in Form-9E for 2019-24 tariff block in the petition.

78. We have considered the submissions of the Petitioner and UPPCL. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 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 worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed is as under:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	1322.90	1322.90	1322.90	1322.90	1322.90
Cumulative Repayments up to Previous Year	1123.44	1223.93	1255.73	1287.52	1319.32
Net Loan-Opening	199.46	98.96	67.17	35.37	3.58
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	100.49	31.80	31.80	31.80	3.58
Net Loan-Closing	98.96	67.17	35.37	3.58	0.00
Average Loan	149.21	83.07	51.27	19.47	1.79
Weighted Average Rate of Interest on Loan (%)	9.6436	9.6614	9.7084	9.6939	9.2239
Interest on Loan	14.39	8.03	4.98	1.89	0.16

Return on Equity (RoE)

79. Regulations 30 and 31 of the 2019 Tariff Regulations provide as under:



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

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

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

Provided further that:

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

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

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

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

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



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

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

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."

80. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company.

81. UPPCL has submitted that the Petitioner should consider the figures of equity and the rate of RoE on the basis of MAT rates approved by Income Tax Authorities. In response, the Petitioner vide affidavit dated 8.3.2021 has submitted that in the absence of IT assessment order pertaining to 2019-24 period, 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 rate specified by the Commission as per illustration under Regulation 31(2)(ii) of the 2019 Tariff Regulations during the 2019-24 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 of any financial year.

82. We have considered the submissions made by the Petitioner and UPPCL. As regards UPPCL's contention regarding Petitioner's claim of RoE for the 2019-24 tariff period, it is observed that the Petitioner has claimed RoE @18.782% after grossing up RoE with MAT rate of 17.472% based on the rate specified in the illustration under Regulation 31(2)(ii) of the 2019 Tariff Regulations. Further, 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 of any financial year as provided in Regulation 31(3) of the 2019 Tariff Regulations.

83. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the transmission asset as under:



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	566.96	566.96	566.96	566.96	566.96
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	566.96	566.96	566.96	566.96	566.96
Average Equity	566.96	566.96	566.96	566.96	566.96
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	106.49	106.49	106.49	106.49	106.49

Operation & Maintenance Expenses (O&M Expenses)

84. The O&M expenses claimed by the Petitioner for the transmission asset for the 2019-24 tariff period are as under:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station Bays 400 kV					
Singrauli-Rihand- I Bay Singrauli- Kanpur Bay	2 Number				
Norms (₹ lakh/bays)	32.150	33.280	34.450	35.660	36.910
O&M expenses (₹ in lakh)	64.30	66.56	68.90	71.32	73.82
Transmission lines					
D/C (Twin/Triple Conductor) (km)	1.901 km				
Norms (₹ lakh/bays)	0.881	0.912	0.944	0.977	1.011
O&M expenses (₹ in lakh)	1.67	1.73	1.79	1.86	1.92
S/C (Twin/Triple Conductor)	1.006 km				
Norms (₹ lakh/bays)	0.503	0.521	0.539	0.558	0.578
Total O&M expenses (₹ in lakh)	0.51	0.52	0.54	0.56	0.58
PLCC (2% of ₹ 67.58 lakh)	1.35	1.35	1.35	1.35	1.35
Total O&M expenses (₹ in lakh)	67.83	70.16	72.58	75.09	77.67

85. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations provide that:

“35 Operation and Maintenance Expenses

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

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



Order in Petition No.474/TT/2019



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:



Order in Petition No.474/TT/2019



- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ± 500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three year

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

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

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

(4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up."

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



Tariff Regulations and the 2019 Tariff Regulations and the norms for sub-station have been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No. 126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. The relevant portions of the order dated 24.1.2021 in Petition No. 126/TT/2020 are extracted hereunder:

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

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

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

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



87. The O&M expenses has been worked out for the transmission asset as per the norms specified in the 2019 Tariff Regulations and the same are as under:

	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses					
2 Number of 400kV bays					
Norms (₹ lakh/Bay)	32.150	33.280	34.450	35.660	36.910
Total	64.30	66.56	68.90	71.32	73.82
1.006 km S/C (Single Conductor)					
Norms (₹ lakh/km)	0.503	0.521	0.539	0.558	0.578
Total	0.51	0.52	0.54	0.56	0.58
1.901 km D/C (Twin/Triple Conductor)					
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
Total	1.67	1.73	1.79	1.86	1.92
Total O&M expenses allowed (₹ in lakh)	66.48	68.82	71.24	73.74	76.32

Interest on Working Capital (IWC)

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

“34. Interest on Working Capital

(1)...

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

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

(3)Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:



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

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

"3.Definitions ...

(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;"

89. 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%. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The ROI considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas, ROI for 2020-21 onwards has been considered as 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points). The components of the working capital and interest thereon allowed is as under:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M Expenses including security expenses for 1 month) **	5.54	5.73	5.94	6.14	6.36
Maintenance Spares (Maintenance Spares @ 15% of O&M Expenses including security expenses) **	9.97	10.32	10.69	11.06	11.45
Receivables (Receivables equivalent to 45 days of annual fixed cost)**	36.16	27.12	27.05	26.99	27.03
Total Working Capital	51.67	43.18	43.67	44.19	44.84
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	6.23	4.86	4.91	4.97	5.04

**As per the 2019 Tariff Regulations

Annual Fixed Charges of the 2019-24 Tariff Period

90. The transmission charges allowed for the transmission asset for the 2019-24 tariff period are summarised as under:



(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	100.49	31.80	31.80	31.80	31.80
Interest on Loan	14.39	8.03	4.98	1.89	0.16
Return on Equity	106.49	106.49	106.49	106.49	106.49
Interest on Working Capital	6.23	4.86	4.91	4.97	5.04
O & M Expenses	66.48	68.82	71.24	73.74	76.32
Total	294.08	219.98	219.41	218.88	219.81

Filing Fee and the Publication Expenses

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

Licence Fee & RLDC Fees and Charges

92. UPPCL has submitted that payment of licence fee is onus of the Petitioner. In response, the Petitioner has submitted that the license fee may be allowed to be recovered separately from the Respondents in terms of Regulation 70 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019. The fees and charges to be paid by the Petitioner as ISTS licensee (deemed ISTS licensee) under Central Electricity Regulatory Commission (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 70(3) of the 2019 Tariff Regulations.

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



Petitioner shall also be entitled for recovery of RLDC fee and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for 2019-24 tariff period.

Goods and Services Tax

94. 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

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

Security Expenses

96. The Petitioner has submitted that security expenses for the transmission asset are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security



expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

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

Capital Spares

98. The Petitioner has sought reimbursement of capital spares at the end of 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

99. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

100. To summarise, the revised Annual Fixed Charges allowed for the transmission asset for 2004-09 period are as under:



(₹ in lakh)	
2007-08 (pro-rata 11 months)	2008-09
302.33	353.46

101. The consequential revision of Annual Fixed Charges allowed for the transmission asset for the 2009-14 tariff period are as under:

(₹ in lakh)					
Particulars	2009-10	2010-11	2012-13	2013-14	2014-15
Annual Fixed Charges	422.85	425.06	423.53	422.06	422.35

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	403.94	400.15	395.98	391.96	388.43

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	294.08	219.98	219.41	218.88	219.81

104. This order disposes of Petition No. 474/TT/2019 Both the Annexures form part of the order.

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



Order in Petition No.474/TT/2019

CERC Website S.No. 209/2021



Annexure-1

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014/CDD (₹ in lakh)	ACE Total	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
Land - Freehold	-	-	-	-	-	-	-	-	-
Land - Leasehold	-	-	-	3.34%	-	-	-	-	-
Building Civil Works & Colony Transmission Line	316.63	-	316.63	5.28%	16.72	16.72	16.72	16.72	16.72
Sub Station	1505.64	-	1505.64	5.28%	79.50	79.50	79.50	79.50	79.50
PLCC	67.58	-	67.58	6.33%	4.28	4.28	4.28	4.28	4.28
IT Equipment (Incl. Software)	-	-	-	5.28%	-	-	-	-	-
Total	1889.85	-	1889.85	Total	100.49	100.49	100.49	100.49	100.49
Average Gross Block (₹ in lakh)					1889.85	1889.85	1889.85	1889.85	1889.85
Weighted Average Rate of Depreciation					5.32%	5.32%	5.32%	5.32%	5.32%



Annexure-2

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ In lakh)	ACE (₹ in lakh) Total	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	
Land - Freehold	-	-	-	-	-	Spreading				
Land - Leasehold	-	-	-	3.34%	-					
Building Civil Works & Colony	-	-	-	3.34%	-					
Transmission Line	316.63	-	316.63	5.28%	16.72					
Sub Station	1505.64	-	1505.64	5.28%	79.50					
PLCC	67.58	-	67.58	6.33%	4.28					
IT Equipment (Incl. Software)	-	-	-	15.00%	-					
Total	1889.85	-	1889.85		100.49	31.80	31.80	31.80	31.80	
Average Gross Block (₹ In lakh)					1889.85	1889.85	1889.85	1889.85	1889.85	
Weighted Average Rate of Depreciation					5.32%	Spreading				



Summary of Tariff

Form No. - 1

Encl-2

Name of the Transmission Licensee:	Power Grid Corporation of India Limited		
Project	SYSTEM STRENGTHENING IN SINGRUALI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRUALI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOC Date	May 1, 2007

(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	100.50	31.79	31.79	31.79	31.80
Interest on Loan-Form No. 9E	14.39	8.02	4.98	1.89	0.16
Return on Equity-Form No. 8	106.48	106.48	106.48	106.48	106.48
Int. on Working capital-Form No.11	6.23	4.86	4.58	4.64	5.39
Op. and maintenance-Form No.2	66.48	68.81	71.23	73.74	76.32
Total AFC	294.08	219.96	219.06	218.54	220.15

(Petitioner)



Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	SYSTEM STRENGTHENING IN SINGRAULI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRAULI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOCO Date	May 1, 2007

1. Transmission Lines

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/HVDC	S/C or D/C	No of Sub-Conductors	Voltage Level KV	Line Bays	Line Reactor (Including Switchable Reactor)	Line Length Km	Date of Commercial operation	Covered in the present petition	
									Yes/No	If No, Petition No.
LILO OF 400 KV VINDHYACHAL KANPUR LINE AT SINGRAULI	AC	SC	2	400 KV	0.000	0.000	1.006	May 1, 2007	Y	
LILO OF 400 KV VINDHYACHAL KANPUR LINE AT SINGRAULI	AC	DC	2	400 KV	2.000	0.000	1.901	May 1, 2007	Y	

Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
SINGLE CIRCUIT (TWIN CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.503	0.521	0.539	0.558	0.578
No. of Units - (Length in KM)	1.006	1.006	1.006	1.006	1.006



O&M Claimed	0.51	0.52	0.54	0.56	0.58
DOUBLE CIRCUIT (TWIN CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.881	0.912	0.944	0.977	1.011
No. of Units - (Length in KM)	1.901	1.901	1.901	1.901	1.901
O&M Claimed	1.67	1.73	1.79	1.86	1.92



2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transformers/ Reactor/ SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV		
Singrauli-vindhyachal:RIHAND-I BAY	Conventional	400 KV		1.000								May 1, 2007	Y
Singrauli-vindhyachal:KANPUR BAY	Conventional	400 KV		1.000								May 1, 2007	Y
Singrauli-vindhyachal:LINE REACTOR AT SINGRAULI	Conventional	400 KV	1.000							80.000		May 1, 2007	Y

Summary:

O&M Expenses For Substations Covered in the instant petition		2019-20	2020-21	2021-22	2022-23	2023-24
400KV SUB-STATION						
Normative Rate of O&M as per Regulation		32.15	33.28	34.45	35.66	36.91
No. of Units		2.00	2.00	2.00	2.00	2.00
O&M Claimed		64.30	66.56	68.90	71.32	73.82
400KV Sub-station Reactor						
Normative Rate of O&M as per Regulation		0.00	0.00	0.00	0.00	0.00
No. of Units		1.00	1.00	1.00	1.00	1.00
O&M Claimed		0.00	0.00	0.00	0.00	0.00



3. Communication System

Summary:



Summary of O&M Expenses claim

(Amount in Rs. Lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M					
Transmission Line	2.18	2.25	2.33	2.42	2.50
Substation	64.30	66.56	68.90	71.32	73.82
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	66.48	68.81	71.23	73.74	76.32
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition)					
*Security Expenses	0.00	0.00	0.00	0.00	0.00
*Actual Capital Spare consumed	0.00	0.00	0.00	0.00	0.00
*Insurance Premium Paid	0.00	0.00	0.00	0.00	0.00
Total O&M	66.48	68.81	71.23	73.74	76.32

(Petitioner)



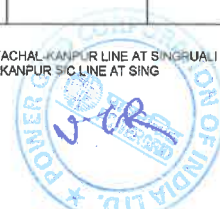
Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	SYSTEM STRENGTHENING IN SINGRAULI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRAULI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOC Date	May 1, 2007

(Amount in Rs. Lakh)

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



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

(Petitioner)



Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	SYSTEM STRENGTHENING IN SINGRUALI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRUALI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOCO Date	May 1, 2007

(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	566.94	566.94	566.94	566.94	566.94
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)	566.94	566.94	566.94	566.94	566.94
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	566.94	566.94	566.94	566.94	566.94
Average Normative Equity	566.94	566.94	566.94	566.94	566.94
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	106.48	106.48	106.48	106.48	106.48
Pro rata return on Equity	106.48	106.48	106.48	106.48	106.48

(Petitioner)



Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	SYSTEM STRENGTHENING IN SINGRUALI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRUALI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOC Date	May 1, 2007

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
BOND XVII -DOCO					
Gross Loan- Opening	591.00	591.00	591.00	591.00	591.00
Cumulative repayments of Loans upto previous year	591.00	591.00	591.00	591.00	591.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	7.39	7.39	7.39	7.39	7.39
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XIX -DOCO					
Gross Loan- Opening	175.00	175.00	175.00	175.00	175.00
Cumulative repayments of Loans upto previous year	131.25	145.83	160.42	175.00	175.00
Net loan-Opening	43.75	29.17	14.58	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	14.58	14.58	14.58	0.00	0.00
Net Loan-Closing	29.17	14.59	0.00	0.00	0.00



Average Net Loan	36.46	21.88	7.29	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	3.3726	2.0239	0.6743	0.00	0.00

BOND XXII -DOCO					
Gross Loan- Opening	40.00	40.00	40.00	40.00	40.00
Cumulative repayments of Loans upto previous year	30.00	33.33	36.67	40.00	40.00
Net loan-Opening	10.00	6.67	3.33	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	3.33	3.33	3.33	0.00	0.00
Net Loan-Closing	6.67	3.34	0.00	0.00	0.00
Average Net Loan	8.34	5.01	1.67	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.68	8.68	8.68	8.68	8.68
Interest on loan	0.7239	0.4349	0.145	0.00	0.00

BOND XXIII -DOCO					
Gross Loan- Opening	25.00	25.00	25.00	25.00	25.00
Cumulative repayments of Loans upto previous year	18.75	20.83	22.92	25.00	25.00
Net loan-Opening	6.25	4.17	2.08	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	2.08	2.08	2.08	0.00	0.00
Net Loan-Closing	4.17	2.09	0.00	0.00	0.00
Average Net Loan	5.21	3.13	1.04	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	0.4819	0.2895	0.0962	0.00	0.00



BOND XXV -DOCO DRAWL ON 12-JUN					
Gross Loan- Opening	278.00	278.00	278.00	278.00	278.00
Cumulative repayments of Loans upto previous year	185.33	208.50	231.67	254.83	278.00
Net loan-Opening	92.67	69.50	46.33	23.17	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	23.17	23.17	23.17	23.17	0.00
Net Loan-Closing	69.50	46.33	23.16	0.00	0.00
Average Net Loan	81.09	57.92	34.75	11.59	0.00
Rate of Interest on Loan on Annual Basis	10.10	10.10	10.10	10.10	10.10
Interest on loan	8.1901	5.8499	3.5098	1.1706	0.00

BOND XXVIII -ADDCAP FOR 2008-2009					
Gross Loan- Opening	15.00	15.00	15.00	15.00	15.00
Cumulative repayments of Loans upto previous year	8.75	10.00	11.25	12.50	13.75
Net loan-Opening	6.25	5.00	3.75	2.50	1.25
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	1.25	1.25	1.25	1.25	1.25
Net Loan-Closing	5.00	3.75	2.50	1.25	0.00
Average Net Loan	5.63	4.38	3.13	1.88	0.63
Rate of Interest on Loan on Annual Basis	9.33	9.33	9.33	9.33	9.33
Interest on loan	0.5253	0.4087	0.292	0.1754	0.0588

BOND XXIX -ADDCAP FOR 2008-2009					
Gross Loan- Opening	65.00	65.00	65.00	65.00	65.00
Cumulative repayments of Loans upto previous year	37.92	43.33	48.75	54.17	59.58
Net loan-Opening	27.08	21.67	16.25	10.83	5.42



Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	5.42	5.42	5.42	5.42	5.42
Net Loan-Closing	21.66	16.25	10.83	5.41	0.00
Average Net Loan	24.37	18.96	13.54	8.12	2.71
Rate of Interest on Loan on Annual Basis	9.20	9.20	9.20	9.20	9.20
Interest on loan	2.242	1.7443	1.2457	0.747	0.2493

Summary

Gross Loan- Opening	1,189.00	1,189.00	1,189.00	1,189.00	1,189.00
Cumulative repayments of Loans upto previous year	1,003.00	1,052.82	1,102.68	1,152.50	1,182.33
Net loan-Opening	186.00	136.18	86.32	36.50	6.67
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	49.83	49.83	49.83	29.84	6.67
Net Loan-Closing	136.17	86.35	36.49	6.66	0.00
Average Net Loan	161.10	111.28	61.42	21.59	3.34
Rate of Interest on Loan on Annual Basis	9.6436	9.6614	9.7086	9.6943	9.2246
Interest on loan	15.5358	10.7512	5.963	2.093	0.3081

(Petitioner)



Loans in Foreign Currency

Form No. - 9D

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	SYSTEM STRENGTHENING IN SINGRAULI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRAULI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOCO Date	May 1, 2007

(Petitioner)



Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	SYSTEM STRENGTHENING IN SINGRUALI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRUALI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOC Date	May 1, 2007

(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	1,322.90	1,322.90	1,322.90	1,322.90	1,322.90
Cumulative repayments of Normative loan upto previous year	1,123.47	1,223.97	1,255.76	1,287.55	1,319.34
Net normative loan-Opening	199.43	98.93	67.14	35.35	3.56
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	100.50	31.79	31.79	31.79	3.56
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	98.93	67.14	35.35	3.56	0.00
Average normative loan	149.18	83.04	51.25	19.46	1.78
Weighted Average Rate of interest on actual loan	9.6436	9.6614	9.7086	9.6943	9.2246
Interest on normative loan	14.39	8.02	4.98	1.89	0.16
Pro rata interest on normative loan	14.39	8.02	4.98	1.89	0.16

(Petitioner)



Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	SYSTEM STRENGTHENING IN SINGRUALI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRUALI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOCOCO Date	May 1, 2007

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2024
2019-20						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	316.63	0.00	316.63	316.63	5.28	16.72
Sub Station	1,505.64	0.00	1,505.64	1,505.64	5.28	79.50
Comm. Sys. excluding Fiber Optic	67.58	0.00	67.58	67.58	6.33	4.28
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	1,889.85	0.00	1,889.85	1,889.85	0.00	100.50
Weighted Average Rate of Depreciation(%)					5.317882	

2020-21						
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	316.63	0.00	316.63	316.63	5.28	5.37
Sub Station	1,505.64	0.00	1,505.64	1,505.64	5.28	25.56
Comm. Sys. excluding Fiber Optic	67.58	0.00	67.58	67.58	6.33	0.86
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	1,889.85	0.00	1,889.85	1,889.85	0.00	31.79
Weighted Average Rate of Depreciation(%)					1.682144	

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	316.63	0.00	316.63	316.63	5.28	5.37
Sub Station	1,505.64	0.00	1,505.64	1,505.64	5.28	25.56
Comm. Sys. excluding Fiber Optic	67.58	0.00	67.58	67.58	6.33	0.86
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	1,889.85	0.00	1,889.85	1,889.85	0.00	31.79
Weighted Average Rate of Depreciation(%)					1.682144	



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	316.63	0.00	316.63	316.63	5.28	5.37
Sub Station	1,505.64	0.00	1,505.64	1,505.64	5.28	25.56
Comm. Sys. excluding Fiber Optic	67.58	0.00	67.58	67.58	6.33	0.86
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	1,889.85	0.00	1,889.85	1,889.85	0.00	31.79
Weighted Average Rate of Depreciation(%)					1.682144	

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	316.63	0.00	316.63	316.63	5.28	5.38
Sub Station	1,505.64	0.00	1,505.64	1,505.64	5.28	25.56
Comm. Sys. excluding Fiber Optic	67.58	0.00	67.58	67.58	6.33	0.86
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	1,889.85	0.00	1,889.85	1,889.85	0.00	31.80



Weighted Average Rate of Depreciation(%)					1.682673	
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(Petitioner)



Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	SYSTEM STRENGTHENING IN SINGRAULI VINDHYACHAL CORRIDOR			
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRAULI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING			
Region	Northern Region	DOC Date	May 1, 2007	

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	366.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/ Project	27.00	27.00	27.00	27.00	27.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	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)	16.00	15.00	14.00	13.00	12.00
Capital Base					
1.4 Opening capital cost	1,889.85	1,889.85	1,889.85	1,889.85	1,889.85
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	1,889.85	1,889.85	1,889.85	1,889.85	1,889.85
1.8 Average capital cost	1,889.85	1,889.85	1,889.85	1,889.85	1,889.85
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	1,889.85	1,889.85	1,889.85	1,889.85	1,889.85
1.12 Depreciable Value(1.10+90% of 1.11)	1,700.87	1,700.87	1,700.87	1,700.87	1,700.87
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	5.317882	1.682144	1.682144	1.682144	1.682673



1.14 Depreciation(for the period)	100.50	31.79	31.79	31.79	31.80
1.15 Depreciation(Annualised)	100.50	31.79	31.79	31.79	31.80
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	1,123.44	1,223.94	1,255.73	1,287.52	1,319.31
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	1,223.94	1,255.73	1,287.52	1,319.31	1,351.11

(Petitioner)



Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	SYSTEM STRENGTHENING IN SINGRUALI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRUALI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOCO Date	May 1, 2007

(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	5.54	5.73	5.94	6.15	6.36
Maintenance spares 15% of O&M Expenses	9.97	10.32	10.68	11.06	11.45
Receivables equivalent to 45 days of AFC	36.16	27.12	27.01	26.94	27.07
Total Working capital	51.67	43.17	43.63	44.15	44.88
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	6.23	4.86	4.58	4.64	5.39
Pro rata interest on working capital	6.23	4.86	4.58	4.64	5.39

(Petitioner)



Summary of Tariff

Form No. - 1

Encl-3

Name of the Transmission Licensee:	Power Grid Corporation of India Limited		
Project	SYSTEM STRENGTHENING IN SINGRUALI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRUALI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOC Date	May 1, 2007

(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	31.79	31.80	31.79	31.81	31.79
Interest on Loan-Form No. 9E	0.00	0.00	0.00	0.00	0.00
Return on Equity-Form No. 8	106.48	106.48	106.48	106.48	106.48
Int. on Working capital-Form No.11	5.60	5.78	5.98	6.17	6.40
Op. and maintenance-Form No.2	82.15	86.48	90.98	95.75	100.84
Total AFC	226.02	230.54	235.23	240.21	245.51

(Petitioner)



Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	SYSTEM STRENGTHENING IN SINGRAULI VINDHYACHAL CORRIDOR	
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRAULI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING	
Region	Northern Region	DOC Date May 1, 2007

1. Transmission Lines

(Amount in Rs. Lakh)

Name of Line	Type of Line AC/ HVDC	S/C or D/C	No of Sub-Conductors	Voltage Level KV	Line Bays	Line Reactor (Including Switchable Reactor)	Line Length Km	Date of Commercial operation	Covered in the present petition	
									Yes/No	If No, Petition No.
LILO OF 400 KV VINDHYACHAL KANPUR LINE AT SINGRAULI	AC	SC	2	400 KV	0.000	0.000	1.006	May 1, 2007	Y	
LILO OF 400 KV VINDHYACHAL KANPUR LINE AT SINGRAULI	AC	DC	2	400 KV	2.000	0.000	1.901	May 1, 2007	Y	

Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
	SINGLE CIRCUIT (TWIN CONDUCTOR)				
Normative Rate of O&M as per Regulation	0.492	0.518	0.545	0.573	0.603
No. of Units - (Length in KM)	1.006	1.006	1.006	1.006	1.006



O&M Claimed		0.49	0.52	0.55	0.58	0.61
DOUBLE CIRCUIT (TWIN CONDUCTOR)						
Normative Rate of O&M as per Regulation		0.861	0.906	0.953	1.003	1.056
No. of Units - (Length in KM)		1.901	1.901	1.901	1.901	1.901
O&M Claimed		1.64	1.72	1.81	1.91	2.01



2. Sub Station

Name of Sub-station	Type of Substation	Voltage Level KV	No. of Transformers/ Reactor/ SVC etc. (with capacity)	No. of Bays				MVA/MVAR Capacity				Date of Comm. operation	Covered in the present petition
				765 KV	400 KV	220 KV	132 KV	765 KV	400 KV	220 KV	132 KV		
Singrauli-vindhyachal:RIHAND-I BAY	Conventional	400 KV		1.000								May 1, 2007	Y
Singrauli-vindhyachal:KANPUR BAY	Conventional	400 KV		1.000								May 1, 2007	Y
Singrauli-vindhyachal:LINE REACTOR AT SINGRAULI	Conventional	400 KV	1.000							80.000		May 1, 2007	Y

Summary:

O&M Expenses For Substations Covered in the instant petition	2024-25				2025-26		2026-27		2027-28		2028-29	
	765 KV	400 KV	220 KV	132 KV	132 KV	400 KV	220 KV	132 KV	220 KV	132 KV	132 KV	132 KV
400KV SUB-STATION												
Normative Rate of O&M as per Regulation		29.53		31.08	32.71	34.43						36.23
No. of Units		2.00		2.00	2.00	2.00						2.00
O&M Claimed		59.06		62.16	65.42	68.86						72.46
400KV Sub-station Reactor												
Normative Rate of O&M as per Regulation		0.262		0.276	0.29	0.305						0.322
No. of Units		1.00		1.00	1.00	1.00						1.00
O&M Claimed		20.96		22.08	23.20	24.40						25.76



3. Communication System

Summary:



Summary of O&M Expenses claim

(Amount in Rs. Lakh)

Particular	2024-25	2025-26	2026-27	2027-28	2028-29
A) Normative O&M					
Transmission Line	2.13	2.24	2.36	2.49	2.62
Substation	80.02	84.24	88.62	93.26	98.22
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	82.15	86.48	90.98	95.75	100.84
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition)					
*Security Expenses	0.00	0.00	0.00	0.00	0.00
*Actual Capital Spare consumed	0.00	0.00	0.00	0.00	0.00
*Insurance Premium Paid	0.00	0.00	0.00	0.00	0.00
Total O&M	82.15	86.48	90.98	95.75	100.84

(Petitioner)



Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	SYSTEM STRENGTHENING IN SINGRUALI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRUALI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOC Date	May 1, 2007

(Amount in Rs. Lakh)

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



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

(Petitioner)



Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	SYSTEM STRENGTHENING IN SINGRAULI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRAULI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOCO Date	May 1, 2007

(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	566.94	566.94	566.94	566.94	566.94
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)	566.94	566.94	566.94	566.94	566.94
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	566.94	566.94	566.94	566.94	566.94
Average Normative Equity	566.94	566.94	566.94	566.94	566.94
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	106.48	106.48	106.48	106.48	106.48
Return on Equity	106.48	106.48	106.48	106.48	106.48

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(Petitioner)

Calculation of WAR of interest on actual loan

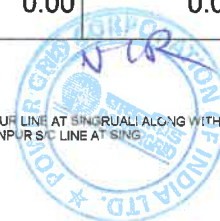
Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	SYSTEM STRENGTHENING IN SINGRUALI VINDHYACHAL CORRIDOR				
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRUALI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING				
Region	Northern Region	DOC Date	May 1, 2007		

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
BOND XVII -DOC0					
Gross Loan- Opening	591.00	591.00	591.00	591.00	591.00
Cumulative repayments of Loans upto previous year	591.00	591.00	591.00	591.00	591.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	7.39	7.39	7.39	7.39	7.39
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XIX -DOC0					
Gross Loan- Opening	175.00	175.00	175.00	175.00	175.00
Cumulative repayments of Loans upto previous year	175.00	175.00	175.00	175.00	175.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00



Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.25	9.25	9.25	9.25	9.25
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XXII -DOCO					
Gross Loan- Opening	40.00	40.00	40.00	40.00	40.00
Cumulative repayments of Loans upto previous year	40.00	40.00	40.00	40.00	40.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.68	8.68	8.68	8.68	8.68
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XXIII -DOCO					
Gross Loan- Opening	25.00	25.00	25.00	25.00	25.00
Cumulative repayments of Loans upto previous year	25.00	25.00	25.00	25.00	25.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.25	9.25	9.25	9.25	9.25
Interest on loan	0.00	0.00	0.00	0.00	0.00



BOND XXV -DOCO DRAWL ON 12-JUN

Gross Loan- Opening	278.00	278.00	278.00	278.00	278.00
Cumulative repayments of Loans upto previous year	278.00	278.00	278.00	278.00	278.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	10.10	10.10	10.10	10.10	10.10
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XXVIII -ADDCAP FOR 2008-2009

Gross Loan- Opening	15.00	15.00	15.00	15.00	15.00
Cumulative repayments of Loans upto previous year	15.00	15.00	15.00	15.00	15.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.33	9.33	9.33	9.33	9.33
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XXIX -ADDCAP FOR 2008-2009

Gross Loan- Opening	65.00	65.00	65.00	65.00	65.00
Cumulative repayments of Loans upto previous year	65.00	65.00	65.00	65.00	65.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00



Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.20	9.20	9.20	9.20	9.20
Interest on loan	0.00	0.00	0.00	0.00	0.00

Summary

Gross Loan- Opening	1,189.00	1,189.00	1,189.00	1,189.00	1,189.00
Cumulative repayments of Loans upto previous year	1,189.00	1,189.00	1,189.00	1,189.00	1,189.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.2246	9.2246	9.2246	9.2246	9.2246
Interest on loan	0.00	0.00	0.00	0.00	0.00

(Petitioner)



Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	SYSTEM STRENGTHENING IN SINGRUALI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRUALI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOCOC Date	May 1, 2007

(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	1,322.90	1,322.90	1,322.90	1,322.90	1,322.90
Cumulative repayments of Normative loan upto previous year	1,322.90	1,322.90	1,322.90	1,322.90	1,322.90
Net normative loan-Opening	0.00	0.00	0.00	0.00	0.00
Addition in normative loan towards the ACE	0.00	0.00	0.00	0.00	0.00
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	0.00	0.00	0.00	0.00	0.00
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	0.00	0.00	0.00	0.00	0.00
Average normative loan	0.00	0.00	0.00	0.00	0.00
Weighted Average Rate of interest on actual loan	9.2246	9.2246	9.2246	9.2246	9.2246
Interest on normative loan	0.00	0.00	0.00	0.00	0.00
Pro rata interest on normative loan	0.00	0.00	0.00	0.00	0.00

(Petitioner)



Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	SYSTEM STRENGTHENING IN SINGRUALI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRUALI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOCO Date	May 1, 2007

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2029
2024-25						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	316.63	0.00	316.63	316.63	5.28	5.37
Sub Station	1,505.64	0.00	1,505.64	1,505.64	5.28	25.56
Comm. Sys. excluding Fiber Optic	67.58	0.00	67.58	67.58	15.00	0.86
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	1,889.85	0.00	1,889.85	1,889.85	0.00	31.79
Weighted Average Rate of Depreciation(%)					1.682144	

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



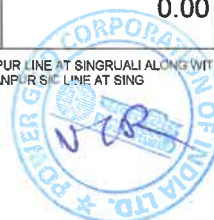
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	316.63	0.00	316.63	316.63	5.28	5.38
Sub Station	1,505.64	0.00	1,505.64	1,505.64	5.28	25.56
Comm. Sys. excluding Fiber Optic	67.58	0.00	67.58	67.58	15.00	0.86
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	1,889.85	0.00	1,889.85	1,889.85	0.00	31.80
Weighted Average Rate of Depreciation(%)					1.682673	

2026-27						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	316.63	0.00	316.63	316.63	5.28	5.37
Sub Station	1,505.64	0.00	1,505.64	1,505.64	5.28	25.56
Comm. Sys. excluding Fiber Optic	67.58	0.00	67.58	67.58	15.00	0.86
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	1,889.85	0.00	1,889.85	1,889.85	0.00	31.79
Weighted Average Rate of Depreciation(%)					1.682144	



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	316.63	0.00	316.63	316.63	5.28	5.38
Sub Station	1,505.64	0.00	1,505.64	1,505.64	5.28	25.56
Comm. Sys. excluding Fiber Optic	67.58	0.00	67.58	67.58	15.00	0.87
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	1,889.85	0.00	1,889.85	1,889.85	0.00	31.81
Weighted Average Rate of Depreciation(%)					1.683202	

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	316.63	0.00	316.63	316.63	5.28	5.37
Sub Station	1,505.64	0.00	1,505.64	1,505.64	5.28	25.56
Comm. Sys. excluding Fiber Optic	67.58	0.00	67.58	67.58	15.00	0.86
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	1,889.85	0.00	1,889.85	1,889.85	0.00	31.79



Weighted Average Rate of Depreciation(%)					1.682144	
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(Petitioner)



Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	SYSTEM STRENGTHENING IN SINGRUALI VINDHYACHAL CORRIDOR			
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRUALI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING			
Region	Northern Region	DOCO Date	May 1, 2007	

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	365.00	365.00	365.00	366.00	365.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/ Project	27.00	27.00	27.00	27.00	27.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	16.00	17.00	18.00	19.00	20.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	11.00	10.00	9.00	8.00	7.00
Capital Base					
1.4 Opening capital cost	1,889.85	1,889.85	1,889.85	1,889.85	1,889.85
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	1,889.85	1,889.85	1,889.85	1,889.85	1,889.85
1.8 Average capital cost	1,889.85	1,889.85	1,889.85	1,889.85	1,889.85
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	1,889.85	1,889.85	1,889.85	1,889.85	1,889.85
1.12 Depreciable Value(1.10+90% of 1.11)	1,700.87	1,700.87	1,700.87	1,700.87	1,700.87
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	1.682144	1.682673	1.682144	1.683202	1.682144



1.14 Depreciation(for the period)	31.79	31.80	31.79	31.81	31.79
1.15 Depreciation(Annualised)	31.79	31.80	31.79	31.81	31.79
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	1,351.11	1,382.90	1,414.70	1,446.49	1,478.30
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	1,382.90	1,414.70	1,446.49	1,478.30	1,510.09

(Petitioner)



Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	SYSTEM STRENGTHENING IN SINGRUALI VINDHYACHAL CORRIDOR		
Element Description	400 KV VINDHYACHAL-KANPUR LINE AT SINGRUALI ALONG WITH BAYS AT SINGRAULI END (REALIGNMENT OF VINDHYACHAL-KANPUR S/C LINE AT SING		
Region	Northern Region	DOCO Date	May 1, 2007

(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	6.85	7.21	7.58	7.98	8.40
Maintenance spares 15% of O&M Expenses	12.32	12.97	13.65	14.36	15.13
Receivables equivalent to 45 days of AFC	27.87	28.42	29.00	29.53	30.27
Total Working capital	47.04	48.60	50.23	51.87	53.80
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	5.60	5.78	5.98	6.17	6.40
Pro rata interest on working capital	5.60	5.78	5.98	6.17	6.40

(Petitioner)



Summary of issue involved in the petition

**PART-III
FORM- 15**

1. Name of the Petitioner	Power Grid Corporation of India Ltd
2. Petition Category	Transmission
3. Tariff Period	2024-29
4. Name of the Project	System Strengthening Scheme in Singrauli-Vindhyachal corridor in the Northern Region
5. Investment Approval date	
6. SCOD of the Project	
7. Actual COD of the project	01.05.2007
8. Whether entire scope is covered in the present petition.	Yes
9. No. of Assets covered in instant petition	1
10. No. of Assets having time over run	
11. Estimated Project Cost as per IA	Rs.21.79 Cr
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.18.89 Crore
15. No. of Assets covered in instant petition and having cost overrun.	NIL

16	Prayer in brief
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17	Key details and any Specific issue involved: 1) There is No add-cap in 2019-24 and 2024-29
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18	Respondents
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Name of Respondents	
1	AJMER VIDYUT VITRAN NIGAM LTD
2	JAIPUR VIDYUT VITRAN NIGAM LTD
3	JODHPUR VIDYUT VITRAN NIGAM LTD
4	HIMACHAL PRADESH STATE ELECTRICITY BOARD LTD
5	PUNJAB STATE POWER CORPORATION LIMITED
6	HARYANA POWER PURCHASE CENTRE
7	POWER DEVELOPMENT DEPTT
8	UTTAR PRADESH POWER CORPORATION LTD.
9	BSES YAMUNA POWER Ltd
10	BSES RAJDHANI POWER Ltd
11	TATA POWER DELHI DISTRIBUTION LTD
12	CHANDIGARH ADMINISTRATION
13	UTTARAKHAND POWER CORPORATION LTD
14	NORTH CENTRAL RAILWAY
15	NEW DELHI MUNICIPAL COUNCIL

(Petitioner)



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

Name of the Petitioner	Power Grid Corporation of India Ltd
Tariff Period	2024-29
Name of the Transmission Project	System Strengthening Scheme in Singrauli-Vindhyachal corridor in the Northern Region
COD of the Project (if entire scope of project is completed)	01.05.2007

Rupees in lakh

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									
				As per Investment approval	As per RCE	As on COD	2024-25	2025-26	2026-27	2027-28	2028-29	Capital Cost as on 31.03.2029	Capital Cost as on cutoff date			
							3	4	5	6	7	8	9	10	11=(5+6+7+8+9+10)	12
1	Asset-1	01.05.2007	31.03.2010	1726	2179	1889.85	-	-	-	-	-	-	-	-	1889.85	1889.85
Total Capital Cost Claimed				1726	2179	1889.85	0	0	0	0	0	0	0	0	1889.85	1889.85

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	Combined Asset comprising of 400 kV Vindhyachal-Kanpur line at Singrauli along with bays at Singrauli end (Realignment of Vindhyachal-Kanpur S/C line at Singrauli and Singrauli Vindhyachal 2nd 400 kV Ckt) and Bus coupler bay at Vindhyachal HVDC.	226.02	230.54	235.23	240.21	245.51
Total AFC for all the Assets			226.02	230.54	235.23	240.21	245.51

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

(Petitioner)



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INDEX **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	NA
FORM-2	Details of Transmission Lines and Substations and Communication System covered in the project scope and O&M for instant asset	✓
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.	NA
FORM- 4A	Statement of Capital cost	NA
FORM- 4B	Statement of Capital Works in Progress	NA
FORM- 4C	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New Project/Element	NA
FORM-5	Element wise Break-up of Project/ Asset/ Element Cost for Transmission System or Communication System	NA
FORM-5A	Break-up of Construction/Supply/Service packages	NA
FORM-5B	Details of all the assets covered in the project	NA
FORM- 6	Actual Cash Expenditure and Financial Package up to COD	NA
FORM- 7	Statement of Additional Capitalisation after COD	NA
FORM- 7A	Financing of Additional Capitalisation	NA
FORM- 7B	Statement of Additional Capitalisation during five year before the end of the useful life of the project.	NA
FORM- 8	Calculation of Return on Equity	✓
FORM-8A	Details of Foreign Equity	NA
FORM-9	Details of Allocation of corporate loans to various transmission elements	NA
FORM-9A	Details of Project Specific Loans	NA
FORM-9B	Details of Foreign loans	NA
FORM-9C	Calculation of Weighted Average Rate of Interest on Actual Loans	NA
FORM-9D	Loans in Foreign Currency	NA
FORM-9E	Calculation of Interest on Normative Loan	✓
FORM- 10	Calculation of Depreciation Rate on original project cost	✓
FORM- 10A	Statement of Depreciation	✓
FORM- 10B	Statement of De-capitalisation	NA
FORM- 11	Calculation of Interest on Working Capital	NA
FORM- 12	Details of time over run	NA
FORM- 12A	Incidental Expenditure during Construction	NA
FORM- 12B	Calculation of IDC & Financing Charges	NA
FORM- 13	Details of Initial spares	NA
FORM- 14	Non-Tariff Income	NA
FORM- 15	Summary of issue involved in the petition	✓
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)	NA
2	Region wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & Annexure for the new Transmission System & Communication System for the relevant years.	NA
3	Copies of relevant loan Agreements	NA
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	Yes
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	NA
6	Copies of the BPTA/TSA/PPA with the beneficiaries, if any	NA
7	Detailed note giving reasons of cost and time over run, if applicable. List of supporting documents to be submitted: a. Detailed Project Report b. CPM Analysis c. PERT Chart and Bar Chart d. Justification for cost and time Overrun	Yes
8	Transmission Licensee shall submit copy of Cost Audit Report along with cost accounting records, cost details, statements, schedules etc. for the transmission system as submitted to the Govt. of India for first two years i.e. 2019-20 and 2020-21 at the time of 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.	NA
9.	BBMB is maintaining the records as per the relevant applicable Acts. Formats specified herein may not be suitable to the available information with BBMB. BBMB may modify formats suitably as per available information to them for submission of required information for tariff purpose.	NA
10.	Any other relevant information, (Please specify)	NA
Note 1: Electronic copy of the petition (in words format) and detailed calculation as per these formats (in excel format) and any other information submitted has to be uploaded in the e-filing website and shall also be furnished in pen drive/flash drive.		

