

BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. ____ /TT/ ____

IN THE MATTER OF: -

Petition for truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for Combined Asset under “Unchahar-III Transmission System” in 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
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GURGAON

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--- **PETITIONER**

Uttar Pradesh Power Corporation Ltd.

Shakti Bhawan, 14, Ashok Marg

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

FILED BY

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)

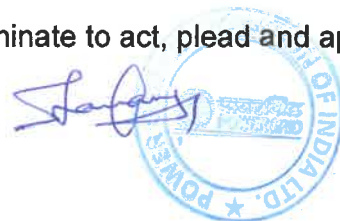
MEMO OF APPEARANCE

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.


(V.C. Sekhar)

GURGAON

DATED:- 29.07.2024

Sr. General Manager (Regulatory Cell)



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----- RESPONDENT(S)

Shakti Bhawan, 14, Ashok Marg

Lucknow - 226 001

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And others

A. Executive Summary of the Petition:

(i) Brief Background of the Petitioner

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



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

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

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

(iii) Background of Transmission Assets:

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

Asset No	Asset Name	DOCO	Remarks
Combined Asset	Asset-I: 220 kV S/C Unchahar- Raibareilly Transmission Line along with associated bays at Raibareilly, LILO of 220 kV D/C Unchahar-Lucknow Transmission Line at Raibareilly and 100 MVA, 220/132 kV ICT-III at Raibareilly along with associated bays and Asset-II: 100 MVA, 220/132 kV ICT-II at Raibareilly Sub-station along with associated bays	01.08.2007 & 01.11.2007	Notional COD: 01.11.2007

(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	7346.00	5238.34	No add cap	5238.34

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	7346.00	5238.34	No add cap	5238.34

5. Details of tariff claimed are as under:

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

Rs in Lakhs

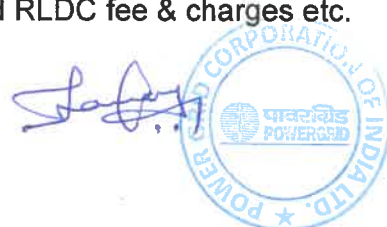
Name of the asset	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset	AFC approved	815.40	657.67	653.93	650.34	647.35
	Revised AFC based on truing up	815.40	657.68	653.00	649.39	648.30

Tariff claimed for 2024-29 tariff block:

Rs in Lakhs

Name of the asset	2024-25	2025-26	2026-27	2027-28	2028-29
Combined Asset	598.64	597.36	596.53	598.09	604.95

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	Asset-I: 220 kV S/C Unchahar-Raibareilly Transmission Line along with associated bays at Raibareilly, LILO of 220 kV D/C Unchahar-Lucknow Transmission Line at Raibareilly and 100 MVA, 220/132 kV ICT-III at Raibareilly along with associated bays and Asset-II: 100 MVA, 220/132 kV ICT-II at Raibareilly Sub-station along with associated bays	01.11.2007 (Notional)	Earlier covered under petition no. 119/TT/2020 now covered under instant petition

10. Cost details:

The capital cost of Rs. 5238.34 Lakhs for subject Asset has been admitted by Hon'ble commission vide order dated 17.10.2021 in petition no. 119/TT/2020. Copy of order is enclosed as Encl-1. In the current petition, no additional capital expenditure was incurred during the 2019-24 tariff block, and no additional capital expenditures are proposed during the 2024-29 tariff block.



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

Based on the applicable rate of MAT @ 15 %, 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.

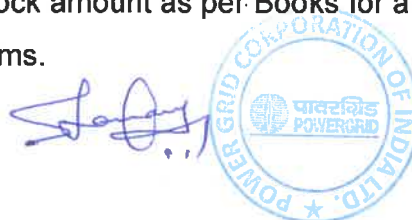
12. The trued up annual transmission tariff for the tariff period 2019-24 is summarized as below:

Rs in Lakh

Project		2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset	AFC approved	815.40	657.67	653.93	650.34	647.35
	Revised AFC based on truing up	815.40	657.68	653.00	649.39	648.30

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.



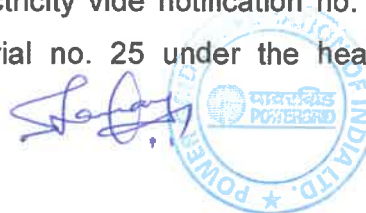
13. The tariff worked out for 2024-29 tariff block is summarized below:

Rs in Lakh

Project		2024-25	2025-26	2026-27	2027-28	2028-29
Combined Asset	AFC	598.64	597.36	596.53	598.09	604.95

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 to time for the applicable periods.

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

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

A. PRAYER

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

- a) Approve the trued-up Transmission Tariff for 2019-24 block and transmission tariff for 2024-29 block for the asset covered under this petition, as per para 12 and 13 above.
- b) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulations, 2019 and Tariff Regulations, 2024 as per para 12 and 13 above for respective block.

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

- c) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 94 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, and other expenditure (if any) in relation to the filing of petition.
- d) Allow the petitioner to bill and recover 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.

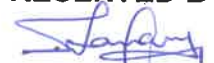
and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice

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 Combined Asset under “Unchahar-III Transmission System” in 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.

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

--- PETITIONER

Uttar Pradesh Power Corporation Ltd.

Shakti Bhawan, 14, Ashok Marg

Lucknow - 226 001

Represented by Its Chairman

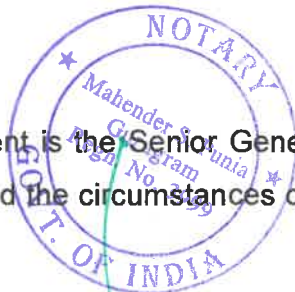
And others

----- RESPONDENT(S)

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.



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


MAHENDER S. PUNIA
ADVOCATE & NOTARY
Dist. Gurugram (Haryana) India

25
25



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
13/12/22

Mukesh Khanna
ED (Commercial &RC)



**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 119/TT/2020

Coram:

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

Date of order: 17.10.2021

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and revision of transmission tariff of 2004-09 and 2009-14 periods, truing up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2019 for **Asset-I: 220 kV S/C Unchahar- Raibareilly Transmission Line** along with associated bays at Raibareilly, LILO of 220 kV D/C Unchahar-Lucknow Transmission Line at Raibareilly and 100 MVA, 220/132 kV ICT-III at Raibareilly along with associated bays and **Asset-II: 100 MVA, 220/132 kV ICT-II at Raibareilly Sub-station** along with associated bays under 'Unchahar-III Transmission System' in Northern Region.

And in the Matter of:

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

.....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg,
Jaipur - 302 005.
2. Ajmer Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur – 302017 (Rajasthan).
3. Jaipur Vidyut Vitran Nigam Limited, 132 kV,
GSS RVPNL Sub-station Building,

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Authorised Signatory

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Page 27 of 82
Authorised Signatory
Power Grid Corporation of India Ltd.
Plot No. 2, Sector-29, Gurgaon-122001 (HARYANA)
Page 1 of 56



- Caligiri Road, Malviya Nagar,
Jaipur - 302017 (Rajasthan).
4. Jodhpur Vidyut Vitran Nigam Limited,
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 - 171 004.
 6. Punjab State Electricity Board,
The Mall, Patiala - 147 001.
 7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana) - 134 109.
 8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu.
 9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow - 226 001.
 10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi - 110 002.
 11. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place, New Delhi
 12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi.
 13. Tata Power Delhi Distribution Limited,
33 kV Sub-station Building, Hudson Lane, Kingsway Camp,
North Delhi - 110009.
 14. Chandigarh Administration,
Sector -9, Chandigarh.
 15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road, Dehradun.



16. North Central Railway,
Allahabad.
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi - 110002

.....Respondent(s)

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

For Respondents: Shri R.B. Sharma, Advocate, BRPL
Shri Mohit Mudgal, Advocate, BYPL
Ms. Megha Bajpeyi, BRPL

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, a deemed transmission licensee, for revision of transmission tariff of 2004-09 and 2009-14 periods, truing up of transmission tariff 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 for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the following assets under "Unchahar-III Transmission System" (hereinafter referred to as "the transmission system") in Northern Region:

Asset-I: 220 kV S/C Unchahar-Raibareilly Transmission Line along with associated bays at Raibareilly, LILO of 220 kV D/C Unchahar-Lucknow Transmission Line at Raibareilly and 100 MVA, 220/132 kV ICT-III at Raibareilly along with associated bays; and



Asset-II: 100 MVA, 220/132 kV ICT-II at Raibareilly Sub-station along with associated bays.

2. The Petitioner has made the following prayers in this petition:
- 1) Approve the revised Transmission Tariff for 2004-09 block and transmission tariff for 2009-14 block for the asset covered under this petition, as per para 8 above.
 - 2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the asset covered under this petition, as per para 9 and 10 above.
 - 3) Allow the de-capitalization of 100 MVA, 220/132 kV ICT-II at Raibareilly from the present project and re-capitalization under Augmentation of Transformation Capacity at Raebareilly&Sitarganj 220/132 kV S/S and also allow the carrying cost between the date of de-capitalization and date of re-capitalization as the same has been done due to system requirement taking due concurrence of the beneficiaries and not suo-moto. Further it is prayed not to de-capitalize 100 MVA, 220/132 kV ICT-III at Raibareilly as the same is kept as spare as approved by RPC/SCM and replacement was not done suo-moto.
 - 4) 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 Regulations 2019 as per para 9.0 and 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 transmission customers /Dlc 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 allowed to recover the deferred tax liability materialised directly without making any application before the commission as provided in the regulation.
 - 5) 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) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
 - 6) 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) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
 - 7) 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.
 - 8) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 10.5 above.
 - 9) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
 - 10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.



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

Background

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

(a) The Investment Approval (IA) for the transmission system was accorded by the Board of Directors of the Petitioner Company vide Memorandum dated 2.5.2005 at estimated cost of ₹7346 lakh including IDC of ₹392 lakh. The notional date of commercial operation of the transmission assets has been taken as 1.11.2007.

(b) The scope of work covered under the transmission system consists of Asset-I and Asset-II.

(c) As per IA, the transmission system was scheduled to be put under commercial operation by May 2008. However, Asset-I and Asset-II were put under commercial operation (COD) w.e.f. 1.8.2007 and 1.11.2007 respectively. Thus, there was no time over-run.

(d) The transmission tariff in respect of transmission assets from COD to 31.3.2009 was determined vide order dated 30.6.2009 in Petition No. 170/2008. The transmission tariff allowed vide order dated 30.6.2009 in Petition No. 170/2008 was revised vide order dated 3.3.2010 in Petition No. 293/2009 on account of Additional Capital Expenditure (ACE) incurred during 2008-09 period.

(e) The transmission assets were combined during 2009-14 tariff period and tariff in respect of the Combined Asset for 2009-14 period was allowed vide order dated 10.2.2011 in Petition No. 253/2010. The tariff allowed for 2009-14 period was trued up and tariff for the period from 1.4.2014 to 31.3.2019 was determined in respect of the Combined Asset vide order dated 28.1.2016 in Petition No. 428/TT/2014.



(f) The transmission tariff allowed for 2014-19 tariff period vide order dated 28.1.2016 in Petition No. 428/TT/2014 and the transmission tariff based on truing up claimed by the Petitioner in the instant petition is as follows:

Particular	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges (AFC) approved vide order dated 28.1.2016 in Petition No. 428/TT/2014	1207.57	1190.72	1174.25	1158.06	1142.32
AFC claimed by the Petitioner based on truing up in the instant Petition	1231.78	1216.66	1200.18	1135.30	1071.37

(g) The Petitioner has sought revision of transmission tariff allowed for 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 the judgments of the Appellate Tribunal for Electricity (APTEL) dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and dated 13.6.2007 in Appeal No. 139 of 2006 and batch cases. The Petitioner has also sought consequential revision of tariff allowed for 2009-14 tariff period, truing up of tariff of 2014-19 tariff period and determination of tariff for 2019-24 tariff period of the Combined Asset.

(h) APTEL vide judgment dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters pertaining to generating stations of NTPC had considered 4 (four) issues. The issues considered by APTEL and its decisions are as given in the following table:

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



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

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

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

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



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

(k) Based on APTEL's judgments dated 22.1.2007 and 13.6.2007, the Petitioner sought revision of tariff of its transmission assets for 2001-04 and 2004-09 periods vide Petition No. 121/2007. The Commission after taking into consideration the pendency of Appeals before the Hon'ble Supreme Court adjourned the said petition *sine die* and directed that the same be revived after the disposal of Civil Appeals by the Hon'ble Supreme Court.

(l) The Hon'ble Supreme Court vide its order dated 10.4.2018, dismissed the said Civil Appeals filed against APTEL's said judgments. Thus, the judgements of APTEL have attained finality.

(m) Consequent to the Hon'ble Supreme Court's order dated 10.4.2018 in NTPC matters, Petition No. 121/2007 was listed for hearing on 8.1.2019 before the Commission. The Commission vide order dated 18.1.2019 in Petition No. 121/2007, directed the Petitioner to submit its claim separately for the assets at the time of filing of truing up petition for the 2014-19 tariff period.

(n) The instant petition was heard on 31.3.2021 and in view of APTEL's judgments dated 22.1.2007 and 13.6.2007 and the order of Hon'ble Supreme Court dated 10.4.2018 the tariff is being revised for 2004-09 and 2009-14 period. Period wise transmission tariff is being re-worked based on the Tariff Regulations applicable for the respective tariff periods and suitable assumptions have been made at certain places and applied which are indicated.

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



5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers. Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No. 9, has filed its reply vide affidavit dated 3.10.2020 and has raised issues on verification of calculation of revised tariff, grossing up of Return on Equity (RoE), Interest on Loan (IoL), receivables for Working Capital, decapitalization of the second 100 MVA ICT and IoL during 2019-24 tariff period. The Petitioner vide affidavit dated 1.3.2021 has filed rejoinder to the reply of UPPCL. BSES Rajdhani Power Limited (BRPL), Respondent No. 12 has also filed its reply vide affidavit dated 17.3.2021 and has raised the issues of revision of tariff, grossing up of RoE, MAT, effective tax rate, tax holiday benefit under Section 80IA, tax return filed by the Petitioner, de-capitalization, adoption of Indian Accounting Standards, deferred tax liability and over payment of income tax, security expenses and capital spares, GST, filing fee and expenses incurred on publication of notices etc. The Petitioner vide affidavit dated 25.3.2021 has filed rejoinder to the reply of BRPL. The issues raised by UPPCL and BRPL and the clarifications given by the Petitioner are dealt in the relevant portions of this order.

Re: Interest on Loan (IoL)

6. APTEL while dealing with the issue of computation of IoL, in judgment dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters, observed that IoL for the period from 1.4.1998 to 31.3.2001 shall be computed only on normative loan repayment as per its judgment dated 14.11.2006 in Appeal No. 94 of 2005 and Appeal No. 96 of 2005. APTEL vide its judgment dated 14.11.2006 in Appeal No. 94



of 2005 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 IoL liability order for the period 1.4.1998 to 31.3.2001. In view of the above, the interest allowed for 2004-09 tariff period is being revised on the basis of the normative debt repayment methodology.

Re: Additional Capital Expenditure (ACE)

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

Re: Depreciation

8. As regards depreciation, APTEL in its judgement dated 13.6.2007 in Appeal No.139 of 2006 and batch matters observed that depreciation is an expense and it cannot be deployed for deemed repayment of loan and accordingly directed the Commission to compute the outstanding loan afresh. In view of the above directions of APTEL, the outstanding loan allowed for the transmission asset for 2004-09 tariff period is revised in the instant order.

9. The revision of transmission tariff allowed for 2004-09 tariff period necessitates the revision of transmission tariff allowed for 2009-14 tariff period, which is also being done in the present order. The implementation of the directions of APTEL vide judgments dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters, in case



of the Petitioner, was kept pending awaiting the outcome of the Civil Appeals filed before the Hon'ble Supreme Court. Taking into consideration the facts of the case and keeping in view the interest of the consumers, we are of the view that the beneficiaries should not be burdened with the carrying cost for the difference in the tariff allowed earlier and allowed in the instant order for the 2004-09 and 2009-14 tariff periods. Therefore, we direct that the Petitioner will neither claim nor pay any carrying cost from or to the beneficiaries for the difference, if any, in the tariff allowed earlier and the tariff being allowed in the instant order. Further, the said difference in tariff shall be recovered/ paid over a period of six months from the date of issue of this order.

10. The hearing in this matter was held on 31.3.2021 through video conference and order was reserved in the matter.

11. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 3.1.2020, Petitioner's affidavits dated 28.9.2020 and 18.3.2021, reply of UPPCL filed vide affidavit dated 3.10.2020, reply of BRPL filed vide affidavit dated 17.3.2021 and Petitioner's rejoinder to the replies of UPPCL and BRPL vide affidavits dated 1.3.2021 and 25.3.2021 respectively.

12. Having heard the representatives of the Petitioner, learned counsel for BRPL and having perused the material on record, we proceed to dispose of the petition.

13. UPPCL has submitted that the Petitioner has failed to submit the judgments of APTEL in Appeals on the basis of which tariff has been revised/ determined. UPPCL has further submitted that revision of tariff is a complex task and the Petitioner has failed to provide complete information with regard to the revision of



tariff. It was further submitted by UPPCL that the Petitioner has also failed to provide the Auditor's certificate with respect to changes in depreciation and IWC brought into each year from 2004 to 2019 period in light of the judgments and orders passed by APTEL and the Commission with regard to revision of tariff. UPPCL has also submitted that the Petitioner may be directed to provide all the necessary information with respect to changes in depreciation and IWC (interest on working capital) for verification of its claim from 2004-2019 periods.

14. In response, the Petitioner has submitted that APTEL judgments have been submitted in Petition No. 255/TT/2019 and also in rejoinder to UPPCL vide affidavit dated 21.8.2020 in Petition No. 473/TT/2019. The Petitioner has further submitted that the calculation for revision of tariff has been undertaken on the basis of various orders passed by the Commission and no additional information has been used for the same.

15. We have considered the submissions of the Petitioner and UPPCL. On the issue of non-submission of copy of the judgements of APTEL along with the petition by the Petitioner, we are of the view that the judgments of APTEL are available in the public domain. Therefore, non-submission of the APTEL's judgements cannot be a ground for not entertaining the instant petition. As the Petitioner has submitted that no additional information has been used for its claim of revision of tariff, the submission of UPPCL is rejected.

16. BRPL has also objected to the revision of tariff of 2004-09 and 2009-14 periods based on the APTEL's judgements contending that the Commission had only referred to a portion of the judgement of the Hon'ble Supreme Court in the



matter of *U.P. Power Corporation Limited vs. National Thermal Power Corporation Limited* reported in (2009) 6 SCC 235 and not the entire judgment. The Commission may re-examine the whole issue after considering the entirety of the judgement of Hon'ble Supreme Court and decide if the same is applicable to the facts of the present case. BRPL has contended that the claim to revise the transmission tariff is permissible only when the tariff is in force and not afterwards. BRPL has submitted that the Commission may revisit order dated 6.11.2019 in Petition No. 288/TT/2019, Petition No. 300/TT/2019, Petition No. 301/TT/2019 and Petition No. 305/TT/2019 in view of the facts, legal position and the judgement of the Hon'ble Supreme Court.

17. In response, the Petitioner has submitted that similar objections were raised by BRPL in Petition No. 288/TT/2019 and in Petition No. 290/TT/2020 which were rejected by the Commission and the Commission had allowed the revision of transmission tariff of 2001-04, 2004-09 and 2009-14 periods.

18. We have considered the submissions of the Petitioner and BRPL. As regards the submission of BRPL that for revision of transmission tariff for 2001-04, 2004-09 and 2009-14 periods on account of judgment of APTEL and order of Hon'ble Supreme Court, the Commission has become functus officio, it was placed before us that the Commission, by a combined order dated 6.11.2019 in Petition No. 288/TT/2019, Petition No. 300/TT/2019, Petition No. 301/TT/2019 and Petition No. 305/TT/2019, has already rejected the contentions of BRPL. BRPL has not placed on record if it has filed any appeal against order of the Commission. That being so, these orders have attained finality.



19. We are, therefore, of the view that there is no necessity to revisit the order dated 6.11.2019 and accordingly, the preliminary objections of BRPL are rejected.

20. Before we proceed to dispose of the issues raised by BRPL in the present petition, it is pertinent to mention here that no findings are being given by us on the issues of Indian Accounting Standards, tax on transmission business, deferred tax liability and over-payment of income tax etc. as these issues raised by BRPL have been dealt by us in various other petitions. Suffice it is to say that the Commission vide its order dated 11.2.2021 in Petition No. 24/TT/2020 and vide order dated 17.5.2021 in Petition No. 8/TT/2020 has considered all the above issues of BRPL in detail and as such we refrain from making any fresh observations on the these issues in the present petition. However, the issues which are specific to the instant petition and have not been dealt by the Commission earlier or are required to be considered in the present petition, they are considered in the relevant paragraphs of this order taking into consideration the submissions of the Petitioner and the Respondents.

21. BRPL has submitted that in terms of Regulation 18 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 read with section 94(3) of the Electricity Act, 2003, any Consumer Association/ Forum may be allowed to participate and represent the interests of the consumers before the Commission in the present petition.

22. We have considered the above submission of the BRPL. The Petitioner vide affidavit dated 8.5.2020 has carried out the publication of tariff petition in the newspapers on 15.1.2020 as per Regulation 3(6) and Regulation 3(8) of Central



Electricity Regulatory Commission (Procedure for Making of Application for Determination of Tariff, Publication of Application and Other Related Matters) Regulations, 2004. The Petitioner has also uploaded the petition on its website. No suggestions/objections with regard to present tariff petition were received by the Commission before listing of the present petition for hearing. Therefore, we are of the view that there is no need in the present case to engage any agency to represent the consumer's interest.

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

2004-09 Tariff Period

23. The Commission vide order dated 30.6.2009 in Petition No. 170/2008 approved transmission charges in respect of the transmission assets from COD to 31.3.2009. The said transmission charges were revised vide order dated 3.3.2010 in Petition No. 293/2009 on account of ACE incurred during 2008-09 period. The transmission charges approved in the aforesaid orders are as follows:

(₹ in lakh)

Particulars	Asset-I		Asset-II	
	2007-08 (Pro-rata for 8 months)	2008-09	2007-08 (Pro-rata for 5 months)	2008-09
Depreciation	80.67	131.72	11.46	29.27
Return on Equity	112.27	184.50	14.51	37.32
O&M Expenses	134.46	209.83	13.18	32.90
Advance against Depreciation	0.00	0.00	0.00	0.00
Interest on Loan	165.58	276.67	21.59	56.44
Interest on Working Capital	14.88	23.91	1.82	4.63
Total	507.86	826.63	62.56	160.56

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



(₹ in lakh)

Particulars	Asset-I		Asset-II	
	2007-08 (Pro-rata for 8 months)	2008-09	2007-08 (Pro-rata for 5 months)	2008-09
Depreciation	80.67	131.72	11.46	29.27
Return on Equity	112.27	184.50	14.51	37.32
O&M Expenses	134.46	209.83	13.18	32.90
Advance against Depreciation	0.00	0.00	0.00	0.00
Interest on Loan	168.02	290.59	21.80	58.88
Interest on Working Capital	15.07	25.01	1.84	4.82
Total	510.49	841.65	62.79	163.19

25. We have considered the Petitioner's claim. The tariff is allowed for the transmission assets on the basis of the following:

- a) Admitted capital cost of ₹3839.65 lakh and ₹809.55 lakh for Asset-I and Asset-II respectively as on COD;
- b) ₹339.65 lakh and ₹427.15 lakh as ACE for Asset-I during 2007-08 and 2008-09 periods. Also, ₹40.97 lakh and ₹78.25 lakh ACE for Asset-II during 2007-08 and 2008-09 periods;
- c) Weighted Average Rate of Interest on actual loan adopted from order dated 30.6.2009 in Petition No. 170/2008 and dated 3.3.2010 in Petition No. 293/2009; and
- d) Weighted Average Rate of Depreciation, Rate of Interest for Working Capital and O&M Expenses as per order dated 30.6.2009 in Petition No. 170/2008 and dated 3.3.2010 in Petition No. 293/2009.

26. In view of the above, the revised transmission charges allowed in respect of the transmission assets for 2004-09 tariff period are as follows:



(₹ in lakh)

Particulars	Asset-I		Asset-II	
	2007-08 (Pro-rata for 8 months)	2008-09	2007-08 (Pro-rata for 5 months)	2008-09
Depreciation	80.67	131.72	11.46	29.27
Interest on Loan	165.61	276.68	21.59	56.44
Return on Equity	112.27	184.50	14.51	37.32
Interest on Working Capital	15.02	24.63	1.84	5.21
O&M Expenses	134.46	209.83	13.18	32.90
Advance against Depreciation	0.00	0.00	0.00	0.00
Total	508.02	827.36	62.57	161.14

27. Annual Fixed Charges (AFC) allowed for 2004-09 tariff period vide orders dated 30.6.2009 in Petition No. 170/2008 and vide dated 3.3.2010 in Petition No. 293/2009, the revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

(₹ in lakh)

Particulars	Asset-I		Asset-II	
	2007-08 (Pro-rata for 8 months)	2008-09	2007-08 (Pro-rata for 5 months)	2008-09
AFC approved vide orders dated 30.6.2009 in Petition No. 170/2008 and dated 3.3.2010 in Petition No. 293/2009	507.86	826.63	62.56	160.56
AFC claimed by the Petitioner in the instant petition	510.49	841.65	62.79	163.19
AFC allowed in the instant order	508.02	827.36	62.57	161.14

2009-14 Tariff Period

28. The Commission vide order dated 10.2.2011 in Petition No. 253/2010 approved the tariff in respect of the Combined Asset for 2009-14 period and vide order dated 28.1.2016 in Petition No. 428/TT/2014 trued up the tariff allowed for 2009-14 period and the same is as follows:



Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	270.03	271.81	272.49	276.1	283.48
Return on Equity	311.68	325.06	328.69	335.23	347.49
O&M Expenses	264.94	280.09	296.14	313.06	330.97
Interest on Loan	328.51	305.17	283.21	264.71	247.65
Interest on Working Capital	32.22	32.81	33.24	33.92	34.87
Total	1207.37	1214.94	1213.77	1223.02	1244.46

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

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	270.03	271.81	272.49	276.1	283.48
Return on Equity	311.68	325.06	328.69	335.23	347.49
O&M Expenses	264.94	280.09	296.14	313.06	330.97
Interest on Loan	352.21	328.87	306.88	288.37	271.30
Interest on Working Capital	32.72	33.30	33.74	34.41	35.36
Total	1231.58	1239.13	1237.94	1247.17	1268.61

30. We have considered the Petitioner's claim. The tariff is allowed in respect of the Combined Asset on the basis of the following:

- a) Admitted capital cost of ₹5535.22 lakh for Combined Asset as on 1.4.2009;
- b) ACE of ₹58.89 lakh, ₹8.27 lakh, ₹105.97 lakh, ₹119.05 lakh and ₹160.35 lakh during 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively;
- c) Weighted Average Rate of Interest on actual loan derived/adopted from order dated 28.1.2016 in Petition No. 428/TT/2014; and
- d) Weighted Average Rate of Depreciation as per order dated 28.1.2016 in Petition No. 428/TT/2014.

31. In view of the above, revised transmission charges allowed in respect of the Combined Asset for 2009-14 tariff period are as follows:



(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	270.03	271.81	272.49	276.10	283.48
Interest on Loan	328.51	305.17	283.20	264.71	247.65
Return on Equity	311.68	325.06	328.69	335.23	347.49
Interest on Working Capital	32.22	32.81	33.25	33.92	34.87
O&M Expenses	264.94	280.09	296.14	313.06	330.97
Total	1207.39	1214.94	1213.77	1223.02	1244.46

32. AFC allowed in respect of Combined Asset for 2009-14 tariff period vide orders dated 28.1.2016 in Petition No. 428/TT/2014, revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
AFC approved vide orders dated 28.1.2016 in Petition No. 428/TT/2014	1207.37	1214.94	1213.77	1223.02	1244.46
AFC claimed by the Petitioner in the instant petition	1231.58	1239.13	1237.94	1247.17	1268.61
AFC allowed in the instant order	1207.39	1214.94	1213.77	1223.02	1244.46

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

33. The details of the trued-up transmission charges claimed by the Petitioner in respect of the Combined Asset for 2014-19 period are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	287.72	287.72	287.72	267.94	248.15
Interest on Loan	249.83	222.92	196.01	163.43	130.53
Return on equity	352.22	353.92	353.92	331.77	310.44
Interest on Working Capital	37.31	37.29	37.25	36.13	35.04
O&M Expenses	304.70	314.81	325.28	336.03	347.21
Total	1231.78	1216.66	1200.18	1135.30	1071.37

34. The details of trued-up IWC claimed by the Petitioner in respect of the Combined Asset for 2014-19 period is as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses	25.39	26.23	27.11	28.00	28.93
Maintenance Spares	45.71	47.22	48.79	50.40	52.08
Receivables	205.30	202.78	200.03	189.22	178.56
Total	276.44	276.23	275.93	267.62	259.57
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	37.31	37.29	37.25	36.13	35.04

Capital Cost as on 1.4.2014

35. The capital cost of the Combined Asset has been calculated in accordance with Regulations 9(3) and 9(6) of the 2014 Tariff Regulations. The Commission vide order dated 28.1.2016 in Petition No. 428/TT/2014 approved the transmission tariff in respect of the Combined Asset for 2014-19 period based on approved capital cost of ₹5987.75 lakh as on 31.3.2014. Therefore, the approved capital cost of ₹5987.75 lakh as on 31.3.2014 has been considered as opening capital cost as on 1.4.2014 for working out the true up tariff for 2014-19 period.

Decapitalisation/ shifting of ICTs

36. The Petitioner has submitted that 100 MVA ICT-II and 100 MVA ICT-III were augmented under "Augmentation of Transformation Capacity at Raebareli & Sitarganj", from 100 MVA to 200 MVA under a different project executed during 2014-19 tariff period. The Commission vide order dated 12.12.2018 in Petition No. 160/TT/2018 (dealing with tariff for the project "Augmentation of Transformation Capacity at Raebareli & Sitarganj") has directed the Petitioner to decapitalize ICT-II and re-capitalize the same in the new project where it is being shifted. ICT-II was shifted from Raebareilly to Sitarganj and is being re-utilized there based on recommendations of RPC and SCM. ICT-III was initially kept as a regional spare and was not de-capitalized at the time of the filing the instant petition. However, after filing of the instant petition, ICT-III has been shifted to Nepal.



37. The Petitioner has further submitted that tariff of ICT-II shifted from Raebareilly to Sitarganj and its re-capitalisation has been claimed in Petition No. 273/TT/2020. The Petitioner has prayed to allow ICT-II to be decapitalized in the instant petition and submitted revised Auditor's certificate and tariff forms.

38. The details of replaced 2x100 MVA ICT at Raibareilly Sub-station originally covered in the transmission system are as follows:

Sl. No.	Replaced Asset	COD	Utilization
1	100 MVA 220/ 132 kV ICT-II at Raibareilly	1.11.2007	The same is commissioned on 29.9.2019 at Sitarganj and is filed in Petition No. 273/TT/2020
2	100 MVA 220/132 kV ICT-III at Raibareilly	1.8.2007	Initially agreed to be utilized as Regional Spare, but later on it was commissioned on 10.12.2019 at Tanakpur Sub-station for utilization by Nepal Electricity Authority

39. The augmentation of 100 MVA ICT to 200 MVA ICT was done under project "Augmentation of Transformation Capacity at Raebareilly & Sitarganj 220/ 132 kV Sub-station". Its tariff was determined vide order dated 12.12.2018 in Petition No. 160/TT/2018 and truing-up of its tariff is covered under Petition No. 708/TT/2020 which deals with the truing up of transmission tariff for 2014-19 period. Further existing bay (for 100 MVA ICTs) of present project is being used with augmented 200 MVA ICTs and, therefore, cost of bays has not been claimed by the Petitioner in Petition No. 708/TT/2020. Thus, O&M Expenses of ICT bays have been claimed by the Petitioner in the instant petition and not in Petition No. 708/TT/2020.

40. The Petitioner has further submitted that the actual date of removal of 100 MVA ICT-II is 25.1.2018 and that of ICT-III is 5.11.2017. The Petitioner has



submitted that the date of de-capitalization submitted as per Form-10B is taken as 18.2.2018 and 30.11.2017 for ICT-II and ICT-III respectively, as augmentation has been done due to system requirement taking due concurrence of the beneficiaries and not suo-moto. The Petitioner has also submitted that the payment from Nepal Electricity Authority has been received on 2.1.2020. Since the net block has been received from Nepal Electricity Authority as on 30.11.2017, the same has been de-capitalized on 30.11.2017.

41. With regard to de-capitalization of 100 MVA ICT-II, UPPCL has submitted that O&M Expenses may be allowed for ICT-II but the Petitioner is not entitled to keep ICT-II capitalised once it is taken out from service of Unchahar-III Transmission System. UPPCL has submitted that ICT-II must be de-capitalized and accumulated depreciation be adjusted in the books and AFC be revised during true-up of 2014-19 period.

42. BRPL has submitted that the 2x100 MVA ICT-II and ICT-III at Raebareli were replaced with 2x200 MVA ICTs under augmentation of Transformation Capacity at Raebareli and Sitarganj covered under Petition No. 160/TT/2018. The augmentation of Transformation Capacity requires de-capitalization of assets under Regulation 14(4) of the 2014 Tariff Regulations. BRPL has further submitted that the replaced ICTs are required to be de-capitalized from the date these assets went out of service at Raebareli. Their capitalization/ de-capitalization in other project/ petition should be dealt in that project/ petition separately.



43. In response, the Petitioner has submitted that while ICT-III had been taken out of service, it was in use as a regional spare (before being shifted to Nepal) as approved in the SCM/RPC. Hence, the same may not be de-capitalised.

44. We have considered the submissions of the Petitioner, UPPCL and BRPL. The Petitioner in the course of hearing the matter on 31.3.2021 has prayed for decapitalization of ICT-III which was earlier agreed to be utilized as Regional Spare, but later on, it was commissioned at Tanakpur Sub-station for utilization by Nepal Electricity Authority.

45. The actual date of removal of 100 MVA, 220/132 kV ICT-III at Raibareilly sub-station is on 5.11.2017 and the Petitioner has decapitalized ₹372.96 lakh in respect of this ICT. The actual date of removal of 100 MVA, 220/132 kV ICT-II is 25.1.2018 and the Petitioner has decapitalized ₹376.45 lakh in respect of this ICT. Regulation 9(6) of the 2014 Tariff Regulations, inter alia, provides that the assets not in use or assets de-capitalised shall be removed from the capital cost of the existing and new projects.

46. The de-capitalization has been considered as per the following details :

(₹ in lakh)

Work/ equipment proposed to be decapitalized	Year of capitalization of asset/ equipment being decapitalized	Original Book value of the asset being decapitalized	Debt: Equity Ratio at the time of capitalisation		Cumulative depreciation corresponding to decapitalization	Cumulative repayment of loan corresponding to decapitalization	Actual Date of Removal
1*100 MVA, 220/132 kV ICT-II at Raebareli	2007-08 (1.11.2007)	376.45	70.01	29.99	196.62	196.62	25.1.2018
1*100 MVA, 220/132 kV ICT-III at Raebareli	2007-08 (1.8.2007)	372.96	70.01	29.99	193.37	193.37	5.11.2017

47. The Petitioner has not claimed any ACE in respect of the Combined Asset during 2014-19 period.



Capital Cost considered for true up of tariff for 2014-19 tariff period

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

Capital Cost as on 1.4.2014	ACE during 2014-19 Period	Capital Cost as on 31.3.2019
5987.75	-749.91	5238.34

Debt-Equity Ratio

49. Debt-equity ratio has been allowed in accordance with Regulation 19(3) of the 2014 Tariff Regulations. As per Regulation 19(3) of the 2014 Tariff Regulations, debt-equity ratio allowed by the Commission for determination of tariff for the period ending on 31.3.2014 shall be considered. Accordingly, the admitted debt-equity ratio of 70.00:30.00 for the period ending on 31.3.2014 has been considered as opening debt-equity ratio as on 1.4.2014 for the purpose of truing up of tariff of 2014-19 period of the Combined Asset. The details of debt-equity ratio allowed in respect of the Combined Asset as on 1.4.2014 and 31.3.2019 are as follows:

Funding	Capital cost as on 1.4.2014 (₹ in lakh)	(in %)	Total cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	4191.74	70.01	3667.15	70.01
Equity	1796.01	29.99	1571.19	29.99
Total	5987.75	100.00	5238.34	100.00

Depreciation

50. The Petitioner has claimed depreciation considering the capital expenditure of ₹5987.85 lakh as on 1.4.2014 and de-capitalization of ₹376.45 lakh in respect of 1x100 MVA, 220/132 kV ICT-II at Raebareli and de-capitalization of ₹372.96 in respect of 1x100 MVA, 220/132 kV ICT-III at Raebareli during 2017-18 period.



51. Depreciation has been worked out as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. The Gross Block during the tariff period 2014-19 has been depreciated at Weighted Average Rate of Depreciation (WAROD). WAROD as placed in Annexure-I has been worked out after taking into account the depreciation rates of the Combined Asset as prescribed in the 2014 Tariff Regulations. Accordingly, depreciation allowed for 2014-19 tariff period is as follows:

Particulars	(₹ in lakh)						
	2014-15	2015-16	2016-17	01.04.2017 to 04.11.2017	05.11.2017 to 24.01.2018	25.01.2018 to 31.03.2018	2018-19
Opening Gross Block	5987.75	5987.75	5987.75	5987.75	5614.79	5238.34	5238.34
ACE	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	5987.75	5987.75	5987.75	5987.75	5614.79	5238.34	5238.34
Average Gross Block	5987.75	5987.75	5987.75	5987.75	5614.79	5238.34	5238.34
WAROD (%)	4.81	4.81	4.81	4.81	4.77	4.74	4.74
Balance useful life (Year) (at the beginning of the year)	21.00	20.00	19.00	18.00	18.00	18.00	17.00
Aggregate Depreciable Value	5112.41	5112.41	5112.41	5112.41	4776.74	4437.94	4437.93 6
Depreciation during the year	287.72	287.72	287.72	171.84	59.48	44.87	248.15
Cumulative Aggregate Depreciation	1914.75	2202.47	2490.19	2662.04	2528.15	2376.40	2624.55 3
Remaining Aggregate Depreciable Value	3197.65	2909.93	2622.21	2450.37	2055.22	1864.92	1813.38

52. The details of depreciation approved vide order dated 28.1.2016 in Petition No. 428/TT/2014, as claimed by the Petitioner in the instant petition and trued up depreciation in respect of the Combined Asset is as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.1.2016 in Petition No. 428/TT/2014	287.72	287.72	287.72	287.72	287.72
Claimed by the Petitioner in the instant petition	287.72	287.72	287.72	267.94	248.15
Allowed after true-up in this order	287.72	287.72	287.72	276.20	248.15

Interest on Loan ("IoL")

53. The Petitioner has claimed IoL based on actual interest rates for each year during 2014-19 period.

54. UPPCL has submitted that the Petitioner has not submitted details of rates with corresponding periods insofar as the floating rates are concerned. UPPCL has further submitted that the Petitioner may be directed to submit the same along with Auditor's Certificate.

55. In response, the Petitioner has submitted that no loan with floating rate of interest has been deployed in the transmission assets. The Petitioner has submitted that true-up on account of floating rate of interest has been inadvertently mentioned in the petition.

56. We have considered the submissions of the Petitioner and UPPCL. IoL has been calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL has been worked out as follows:

(i) Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition.

(ii) The repayment for 2014-19 tariff period has been considered to be equal to the depreciation allowed for that period.



57. The details of trued up IoL allowed in respect of the Combined Asset are as follows:

Particulars	(₹ in lakh)						
	2014-15	2015-16	2016-17	01.11.2017 to 04.11.2017	05.11.2017 to 24.01.2018	25.01.2018 to 31.03.2018	2018-19
Gross Normative Loan	4191.74	4191.74	4191.74	4191.74	4191.74	4191.74	3667.11
Cumulative Repayments up to Previous Year	1627.03	1914.75	2202.47	2490.19	2468.67	2331.53	2376.40
Net Loan-Opening	2564.71	2276.99	1989.27	1701.55	1268.59	945.56	900.69
Additions due to ACE	0.00	0.00	0.00	0	0.00	0	0
Repayment during the year	287.72	287.72	287.72	171.845	59.48	44.87	248.15
Net Loan-Closing	2276.99	1989.27	1701.55	1529.70	1209.11	900.69	652.54
Average Loan	2420.85	2133.13	1845.41	1615.63	1238.85	923.13	776.61
Weighted Average Rate of Interest on Loan (%)	9.343	9.342	9.340	9.428	9.428	9.428	9.401
Interest on Loan	226.18	199.27	172.37	90.97	25.92	15.74	73.01

58. The details of IoL approved vide order dated 28.1.2016 in Petition No. 428/TT/2014, as claimed by the Petitioner in the instant petition and trued up depreciation in respect of the Combined Asset is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.1.2016 in Petition No. 428/TT/2014	226.18	199.28	172.37	145.46	118.55
Claimed by the Petitioner in the instant petition	249.83	222.92	196.01	163.43	130.53
Allowed after true-up in this order	226.18	199.27	172.37	132.63	73.01

Return on Equity ("RoE")

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



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

60. UPPCL has submitted that as per Regulation 25(3) of 2014 Tariff Regulations, the transmission licensee shall true up the grossed up rate of RoE at the end of every financial year based on actual tax paid together with any additional demand made by Income Tax Department including interest thereon. UPPCL has further submitted that the Petitioner may not be allowed to gross up RoE on the basis of effective tax percentage of 21.548% as it has not filed return for 2018-19 period. UPPCL has further submitted that the Petitioner may be directed to submit the rate of effective tax applicable for 2014-15, 2015-16, 2016-17, and 2017-18 period duly certified by its Statutory Auditor on which tax was actually paid.

61. In response, the Petitioner has submitted that so far it has been granted trued-up tariff for 2014-19 period by the Commission vide order dated 18.4.2020 in Petition No. 247/TT/2019; order dated 27.4.2020 in Petition No. 274/TT/2019; order dated 23.4.2020 in Petition No. 245/TT/2019 and order dated 16.4.2020 in Petition No. 307/TT/2019 for the transmission assets under the respective petitions. The Petitioner has further submitted that in the said petitions, effective tax rate (for 2014-19 tariff period) was based on notified MAT rates for the purpose of grossing-up of rate of RoE where tariff for each year of the tariff period 2014-19 has been determined by the Commission considering the effective tax percentage to arrive at grossed up RoE (in %).



62. We have considered the above submissions of the Petitioner and UPPCL. The Commission has dealt with the above issue in various petitions including in Petition No. 136/TT/2020 and Petition No. 473/TT/2019. In view of our order dated 24.1.2021 in Petition No. 136/TT/2020 and order dated 25.1.2021 in Petition No. 473/TT/2019, there is no requirement to consider these issues afresh.

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

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

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

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

65. The details of trued-up RoE allowed in respect of the Combined Asset is as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	01.11.2017 to 04.11.2017	05.11.2017 to 24.01.2018	25.01.2018 to 31.03.2018	2018-19
Opening Equity	1796.01	1796.01	1796.01	1796.01	1684.16	1571.2619	1571.26
Addition due to ACE	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing Equity	1796.01	1796.01	1796.01	1796.01	1684.16	1571.26	1571.26
Average Equity	1796.01	1796.01	1796.01	1796.01	1684.16	1571.26	1571.26
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.342	21.342	21.342
Applicable RoE Rate (%)	19.610	19.705	19.705	19.705	19.705	19.705	19.758
Return on Equity for the year	352.20	353.90	353.90	211.37	73.65	55.99	310.45

66. The details of RoE approved vide order dated 28.1.2016 in Petition No. 428/TT/2014, as claimed by the Petitioner in the instant petition and trued up depreciation in respect of the Combined Assets is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.1.2016 in Petition No. 428/TT/2014	352.21	352.21	352.21	352.21	352.21
Claimed by the Petitioner in the instant petition	352.22	353.92	353.92	331.77	310.44
Allowed after true-up in this order	352.20	353.90	353.90	341.00	310.45

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

67. The details of O&M Expenses approved in respect of the Combined Asset under Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of tariff are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission Line					
LILO of 220 kV D/C Unchahar-Lucknow transmission line at Raibareilly (Double Circuit Single Conductor) (km)	2.11	2.11	2.11	2.11	2.11
Norms (₹ lakh/km)	0.30	0.31	0.32	0.33	0.35
O&M Expense	0.64	0.66	0.68	0.70	0.73
220 kV S/C Unchahar-Raibareilly transmission line (Single Circuit Single Conductor) (km)	42.50	42.50	42.50	42.50	42.50



Norms (₹ lakh/km)	0.20	0.21	0.22	0.22	0.23
O&M Expense	8.59	8.88	9.18	9.48	9.78
O&M Expenses Transmission Line	9.22	9.54	9.86	10.18	10.51
Sub-station					
220 kV Raibareilly: ICT II & III Bay	2	2	2	2	2
220 kV Raibareilly: Unchahar Bay I & II	2	2	2	2	2
220 kV Raibareilly: Lucknow Bay I & II	2	2	2	2	2
220 kV Raibareilly: Unchahar Bay III	1	1	1	1	1
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10
O&M Expenses Sub-station	295.47	305.27	315.42	325.85	336.70
Total O&M Expenses (₹ in lakh)	304.69	314.81	325.28	336.03	347.21

Particulars	2014-15	2015-16	2016-17	01.11.2017 to 04.11.2017	05.11.2017 to 24.01.2018	25.01.2018 to 31.03.2018	2018-19
Total O&M Expenses (₹ in lakh)	304.69	314.81	325.28	200.70	74.57	60.76	347.21

68. The details of O&M Expenses approved vide order dated 28.1.2016 in Petition No. 428/TT/2014, as claimed in the instant petition and trued up O&M Expenses allowed in respect of the Combined Asset are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.1.2016 in Petition No. 428/TT/2014	304.69	314.81	325.28	336.03	347.21
Claimed by the Petitioner in the instant petition	304.70	314.81	325.28	336.03	347.21
Allowed after true-up in this order	304.69	314.81	325.28	336.03	347.21

Interest on Working Capital ("IWC")

69. UPPCL has submitted that the Petitioner is claiming receivables for 2 months for the purpose of working capital instead of one and a half month as per Regulation 34(c) of the 2014 Tariff Regulations and as such the Petitioner is required to correct the calculation of receivable for the purpose of working capital and interest thereon.

70. In response, the Petitioner has submitted that as per Regulation 28(1)(c) of the 2014 Tariff Regulations, two months receivables can be considered while



calculating IWC for 2014-19 period and the receivable for true-up of 2014-19 period has been calculated as per 2014 Tariff Regulations.

71. We have considered the submissions of the Petitioner and UPPCL. The Petitioner is entitled to IWC as per Regulation 28 of the 2014 Tariff Regulations and the same is as follows:

(i) Working Capital for Receivables

Working Capital for Receivables has been worked out on the basis of 2 months of annual transmission charges.

(ii) Working Capital for Maintenance spares

Working Capital for Maintenance spares have been worked out based on 15% of O&M Expenses.

(iii) Working Capital for O & M expenses

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

(iv) Rate of interest on working capital

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

72. IWC worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and allowed in respect of the Combined Asset is as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	01.11.2017 to 04.11.2017	05.11.2017 to 24.01.2018	25.01.2018 to 31.03.2018	2018-19
Working Capital for O&M Expenses (O&M Expenses for one month)	25.39	26.23	27.11	28.00	28.00	28.00	28.93
Working Capital for Maintenance Spares (15% of O&M)	45.70	47.22	48.79	50.40	50.40	50.40	52.08
Working Capital for Receivables (Equivalent to two months of annual transmission charges)	201.26	198.74	196.00	194.47	181.30	169.04	168.76
Total Working Capital	272.36	272.20	271.90	272.88	259.70	247.45	249.77
Rate of Interest on working capital (%)	13.50	13.50	13.50	13.50	13.50	13.50	13.50
Interest of Working Capital	36.77	36.75	36.71	22.00	7.78	6.04	33.72

73. The details of IWC approved vide order dated 28.1.2016 in Petition No. 428/TT/2014, as claimed by the Petitioner in the instant petition and trued up depreciation in respect of the Combined Asset is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.1.2016 in Petition No. 428/TT/2014	36.77	36.71	36.67	36.64	36.64
Claimed by the Petitioner in the instant petition	37.31	37.29	37.25	36.13	35.04
Allowed after true-up in this order	36.77	36.75	36.71	35.82	33.72

Approved Annual Fixed Charges for 2014-19 Tariff Period

74. The trued up annual fixed charges (AFC) allowed in respect of the Combined Asset for 2014-19 tariff period are as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	01.11.2017 to 04.11.2017	05.11.2017 to 24.01.2018	25.01.2018 to 31.01.2018	2018-19
Depreciation	287.72	287.72	287.72	171.84	59.48	44.87	248.15
Interest on Loan	226.18	199.27	172.37	90.97	25.92	15.74	73.01
Return on Equity	352.20	353.90	353.90	211.37	73.65	55.99	310.45
Interest on Working Capital	36.77	36.75	36.71	22.00	7.78	6.04	33.72
O&M Expenses	304.69	314.81	325.28	200.70	74.57	60.76	347.21
Total	1207.56	1192.46	1175.98	696.89	241.40	183.40	1012.54

75. Accordingly, the details of the AFC approved vide order dated 28.1.2016 in Petition No. 428/TT/2014, as claimed by the Petitioner in the instant petition and as approved after truing up in the instant order are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.1.2016 in Petition No. 428/TT/2014	1207.57	1190.73	1174.25	1158.06	1142.33
Claimed by the Petitioner in the instant petition	1231.78	1216.66	1200.18	1135.30	1071.37
Allowed after true-up in this order	1207.56	1192.46	1175.98	1121.68	1012.54

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

76. The Petitioner vide affidavit dated 18.3.2021 has claimed the following transmission charges in respect of the Combined Asset for 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	248.15	104.90	104.91	104.90	104.91
Interest on Loan	107.06	90.28	80.08	69.92	60.15
Return on Equity	295.11	295.11	295.11	295.11	295.11
Interest on Working Capital	17.15	15.03	15.14	15.26	15.38
O&M Expenses	169.08	174.98	181.17	187.46	194.07
Total	836.55	680.30	676.41	672.65	669.62

77. The Petitioner has claimed the following IWC for 2019-24 period in respect of the Combined Asset:



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	14.09	14.58	15.10	15.62	16.17
Maintenance Spares	25.36	26.25	27.18	28.12	29.11
Receivables	102.85	83.87	83.39	82.93	82.33
Total	142.30	124.70	125.67	126.67	127.61
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	17.15	15.03	15.14	15.26	15.38

Capital Cost

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

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

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

(a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;

(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

(c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;

(e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;

(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;

(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;

(h) Adjustment of revenue earned by the transmission licensee by using the asset before the date of commercial operation;

(i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;

(k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;

(l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;

(m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;



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

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

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly tried up by excluding liability, if any, as on 1.4.2019;
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
- (c) Capital expenditure on account of 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 asset forming part of the project, but not in use, as declared in the tariff petition;
- (b) De-capitalised Asset after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and



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

79. The Petitioner has claimed capital cost of ₹5238.34 lakh in respect of the Combined Asset as on 31.3.2019, which is same as worked out by the Commission. Accordingly, capital cost of ₹5238.34 lakh in respect of the Combined Asset has been considered as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

80. The Petitioner has not claimed any ACE for 2019-24 tariff period in respect of the Combined Asset.

Debt-Equity Ratio

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

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

Provided that:

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

(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.”

82. The details of debt-equity ratio considered for the purpose of tariff of 2019-24 tariff period are as follows:

Funding	Capital cost as on 1.4.2019 (₹ in lakh)	(in %)	Total cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	3667.15	70.01	3667.15	70.01
Equity	1571.19	29.99	1571.19	29.99
Total	5238.34	100.00	5238.34	100.00

Depreciation

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

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

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

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for



the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

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

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

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

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

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

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

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

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

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

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

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



84. We have considered the submissions of the Petitioner. WAROD as Annexure-II to this order is allowed after taking into account the depreciation rates of assets as prescribed in the 2019 Tariff Regulations. The Combined Asset has already completed 12 years of life as on 31.3.2020. The remaining depreciable value of ₹1565.23 lakh has been spread across the balance useful life of 22 years in accordance with Regulation 33(5) of the 2019 Tariff Regulations. Depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. Depreciation worked out in respect of the Combined Asset is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	5238.34	5238.34	5238.34	5238.34	5238.34
Addition during 2019-24 due to projected ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	5238.34	5238.34	5238.34	5238.34	5238.34
Average Gross Block	5238.34	5238.34	5238.34	5238.34	5238.34
Balance useful life at the beginning of the year (Year)	16	15	14	13	12
Depreciable Value	4437.94	4437.94	4437.94	4437.94	4437.94
Rate of Depreciation (%)	4.74	1.99	1.99	1.99	1.99
Depreciation during the year	248.15	104.35	104.35	104.35	104.35
Cumulative Aggregate Depreciation	2872.71	2977.05	3081.40	3185.75	3290.10
Remaining Aggregate Depreciable Value	1565.23	1460.88	1356.53	1252.18	1147.84

Interest on Loan ("IoL")

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

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

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



(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalisation of such asset.

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

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

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

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

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

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

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

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

86. UPPCL has submitted that the Petitioner is calculating IoL based on interest rate actually prevailing on individual loans as on 1.4.2019 whereas the Commission while approving the tariff for 2014-19 period has considered weighted average rate of interest and as such the Petitioner should claim IoL based on weight average rate on interest subject to truing-up at the end of control period 2019-24. UPPCL has further submitted that the Petitioner should claim/adjust differential of weighted



average rate of interest and floating rate of interest for 2019-24 period after due approval of the Commission instead of directing billing to the beneficiaries.

87. In response, the Petitioner has submitted that from Form-9E it is clear that weighted average rate of interest has been taken into consideration for calculating IoL and there is no loan with floating rate of interest and as such there will not be any difference in weighted average too.

88. 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. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the Combined Asset is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	3667.15	3667.15	3667.15	3667.15	3667.15
Cumulative Repayments up to Previous Year	2624.55	2872.70	2977.05	3081.40	3185.75
Net Loan-Opening	1042.60	794.45	690.10	585.75	481.40
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	248.15	104.35	104.35	104.35	104.35
Net Loan-Closing	794.45	690.10	585.75	481.40	377.06
Average Loan	918.53	742.28	637.93	533.58	429.23
Weighted Average Rate of Interest on Loan (%)	9.389	9.368	9.325	9.275	9.268
Interest on Loan	86.24	69.54	59.48	49.49	39.78

Return on Equity ("RoE")

89. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations specify as follows:

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

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-



of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage:

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

Provided further that:

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

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

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

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

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

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

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

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

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

Where “t” is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the



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

Illustration-

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

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

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;

(d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$

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

90. The Petitioner has submitted that MAT rate is applicable to it. Accordingly, MAT rate applicable in 2019-20 period has been considered for the purpose of RoE which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the Combined Asset is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	1571.19	1571.19	1571.19	1571.19	1571.19
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	1571.19	1571.19	1571.19	1571.19	1571.19
Average Equity	1571.19	1571.19	1571.19	1571.19	1571.19
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	295.10	295.10	295.10	295.10	295.10



Operation & Maintenance Expenses (“O&M Expenses”)

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

“35 Operation and Maintenance Expenses:

(3) Transmission system:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
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
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



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

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

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

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

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

(4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related



to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”

92. O&M expenses as claimed by the Petitioner are within the norms specified under the 2019 Tariff Regulations. The allowable O&M expenses in respect of the Combined Asset are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line					
LILO of 220 kV D/C Unchahar-Lucknow transmission line at Raibareilly (Double Circuit Single Conductor) (km)	2.11	2.11	2.11	2.11	2.11
Norms (₹ lakh/km)	0.38	0.39	0.40	0.42	0.43
O&M Expense	0.80	0.83	0.85	0.88	0.91
220 kV S/C Unchahar-Raibareilly transmission line (Single Circuit Single Conductor) (km)	42.50	42.50	42.50	42.50	42.50
Norms (₹ lakh/km)	0.25	0.26	0.27	0.28	0.29
O&M Expense	10.71	11.05	11.48	11.86	12.28
O&M Expenses Transmission Line	11.51	11.88	12.33	12.74	13.20
Sub-station					
220 kV Raibareilly: ICT II & III Bay	2	2	2	2	2
220 kV Raibareilly: Unchahar Bay I & II	2	2	2	2	2
220 kV Raibareilly: Lucknow Bay I & II	2	2	2	2	2
220 kV Raibareilly: Unchahar Bay III	1	1	1	1	1
Norms (₹ lakh/Bay)	22.51	23.30	24.12	24.96	25.84
O&M Expenses Sub-station	157.57	163.10	168.84	174.72	180.88
Total O&M Expenses (₹ in lakh)	169.08	174.98	181.17	187.46	194.08

Interest on Working Capital (“IWC”)

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

“34. Interest on Working Capital

(1) The working capital shall cover:

.....
.....

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



- i. *Receivables equivalent to 45 days of 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;"

94. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of interest on working capital as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of IWC 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 allowed thereon in respect of the Combined Asset are as follows:



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	14.09	14.58	15.10	15.62	16.17
Working Capital for Maintenance Spares (20% of O&M Expenses)	25.36	26.25	27.18	28.12	29.11
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	100.25	81.08	80.62	80.18	79.59
Total Working Capital	139.71	121.91	122.89	123.92	124.88
Rate of Interest on working capital (%)	12.05	11.25	11.25	11.25	11.25
Interest of Working Capital	16.83	13.71	13.83	13.94	14.05

Annual Fixed Charges for 2019-24 Tariff Period

95. The transmission charges allowed in respect of the Combined Asset for 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	248.15	104.35	104.35	104.35	104.35
Interest on Loan	86.24	69.54	59.48	49.49	39.78
Return on Equity	295.10	295.10	295.10	295.10	295.10
Interest on Working Capital	16.83	13.71	13.83	13.94	14.05
O&M Expenses	169.08	174.98	181.17	187.46	194.08
Total	815.40	657.67	653.93	650.34	647.35

Filing Fee and Publication Expenses

96. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses in terms of Regulation 70(1) of the 2019 Tariff Regulations.

97. BRPL has submitted that though the Commission can allow filing fee and publication expenses at its discretion under Regulation 70(1) of the 2019 Tariff Regulations, but the exercise of such discretion is a judicial discretion in the adjudication of tariff for which no justification has been filed by the Petitioner. BRPL has further submitted that the Commission vide order dated 11.9.2008 in Petition



No. 129 of 2005 has declined the claim of Central Power Sector Undertakings for allowing the reimbursement of the application filing fee.

98. In response, the Petitioner has submitted that it has requested for reimbursement of expenditure by the beneficiaries towards petition filing fee and publication expense, in terms of Regulation 70(1) of the 2019 Tariff Regulations. Further, the Petitioner also placed reliance on the order dated 28.3.2016 in Petition No. 137/TT/2015, where it allowed the recovery of petition filing fee and expenditure for publication of notices from the beneficiaries on pro-rata basis.

99. We have considered the submissions of the Petitioner and BRPL. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on *pro rata* basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

100. The Petitioner has prayed for reimbursement of licence fee and RLDC fees and charges, separately from the Respondents in terms of 2019 Tariff Regulations.

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



Goods and Services Tax

102. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if at any time GST on transmission is withdrawn from negative list in future.

103. BRPL has objected to the prayer of the Petitioner with regard to GST as transmission of electricity is exempted from GST.

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

Security Expenses

105. The Petitioner has submitted that security expenses in respect of the Combined 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.

106. BRPL has submitted that the approach adopted by the Petitioner towards claim of security expenses does not warrant the need for IWC as the same is claimed in advance. BRPL has also submitted that the Petitioner should clarify under which Regulations the claim has been made.

107. In response, the Petitioner has reiterated the submissions made by it in the petition.

108. We have considered the submissions of the Petitioner and BRPL. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for 2019-24 tariff period on the basis of actual



security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been disposed of by the Commission vide order dated 3.8.2021. Therefore, Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

109. The Petitioner has sought reimbursement of capital spares at the end of tariff period.

110. BRPL has submitted that capital spares may be allowed separately after prudence check.

111. We have considered the submissions of the Petitioner and BRPL. The Petitioner's claim for capital spares, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

Sharing of Transmission Charges

112. During the tariff periods 2004-09 and 2009-14 (up to 30.6.2011), the transmission charges for inter-State transmission systems were being shared in accordance with the tariff regulations for the respective tariff periods. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. With effect from 1.11.2020, sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (in short, "the 2020 Sharing Regulations"). Accordingly, the liabilities of the DICs for arrears of transmission charges determined through this



order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of the transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

113. To summarize:

- a) The revised AFC allowed in respect of the transmission assets for 2004-09 tariff period as per the APTEL's judgments are as follows:

(₹ in lakh)

Particulars	Asset-I		Asset-II	
	2007-08 (Pro-rata for 8 months)	2008-09	2007-08 (Pro-rata for 5 months)	2008-09
AFC	508.02	827.36	62.57	161.14

- b) The consequential revision of AFC allowed in respect of the Combined Asset for 2009-14 tariff period are as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
AFC	1207.39	1214.94	1213.77	1223.02	1244.46

- c) The trued-up AFC allowed in respect of the Combined Asset for 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	1207.56	1192.46	1175.98	1121.68	1012.54

- d) AFC allowed in respect of the Combined Asset for 2019-24 tariff period in this order are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	815.40	657.67	653.93	650.34	647.35



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

115. This order disposes of Petition No.119/TT/2020 in terms of the above discussions and findings.

sd/-
(P.K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I.S. Jha)
Member

sd/-
(P. K. Pujari)
Chairperson



2014-19
True-Up

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)						
					2014-15	2015-16	2016-17	01.11.2017 to 04.11.2017	05.11.2017 to 24.01.2018	25.01.2018 to 31.03.18	
					2014-15	2015-16	2016-17	01.11.2017 to 04.11.2017	05.11.2017 to 24.01.2018	25.01.2018 to 31.03.18	
Land	307.30	0.00	307.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building	698.74	0.00	698.74	3.34	23.34	23.34	23.34	23.34	23.34	23.34	23.34
Transmission Line	1363.21	0.00	1363.21	5.28	71.98	71.98	71.98	71.98	71.98	71.98	71.98
Sub Station	3490.00	(749.41)	2740.59	5.28	184.27	184.27	184.27	184.27	184.27	164.58	144.7
PLCC	128.50	0.00	128.50	6.33	8.13	8.13	8.13	8.13	8.13	8.13	8.1
Total	5987.75	(749.41)	5238.34	Weighted Average Rate of Depreciation (%)	287.72	287.72	287.72	287.72	287.72	268.03	248.1
			Average Gross Block (₹ in lakh)		4.81%	4.81%	4.81%	4.81%	4.81%	4.77%	4.74%
					5987.75	5987.75	5987.75	5987.75	5987.75	5614.79	5238.3



(₹ in lakh)

Particulars	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Admitted Capital Cost as on 1.4.2024 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
				2019-20	2020-21	2021-22	2022-23	2023-24
Land	307.30	307.30	0.00	0.00				
Building	698.74	698.74	3.34	23.34				
Transmission Line	1363.21	1363.21	5.28	71.98				
Sub Station	2740.59	2740.59	5.28	144.70				
PLCC	128.50	128.50	6.33	8.13				
Total	5238.34	5238.34		248.15	104.35	104.35	104.35	104.35
	Weighted Average Rate of Depreciation (%)			4.74%	1.99%	1.99%	1.99%	1.99%
	Average Gross Block (₹ in lakh)			5238.34	5238.34	5238.34	5238.34	5238.34



Summary of Tariff

Form No. - 1

Encl-2

Name of the Transmission Licensee:	Power Grid Corporation of India Limited		
Project	UNCHAHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAHAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 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	248.15	104.35	104.35	104.34	104.35
Interest on Loan-Form No. 9E	86.24	69.54	59.49	49.49	39.78
Return on Equity-Form No. 8	295.10	295.10	295.10	295.10	295.10
Int. on Working capital-Form No.11	16.83	13.71	12.89	13.00	15.00
Op. and maintenance-Form No.2	169.08	174.98	181.17	187.46	194.07
Total AFC	815.40	657.68	653.00	649.39	648.30

(Petitioner)



Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	UNCHAHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAHAR-III Transmission System. National DOCCO:		
Region	Northern Region	DOCCO Date	Nov 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 D/C UNCHAHAHAR LUCKNOW at RAIBARIELLY	AC	DC	1	220 KV	0.000	0.000	2.110	Nov 1, 2007	Y	
UNCHAHAHAR RAIBREILLY at RAIBARIELLY	AC	SC	1	220 KV	0.000	0.000	42.500	Nov 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 (SINGLE CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.252	0.26	0.27	0.279	0.289
No. of Units - (Length in KM)	42.50	42.50	42.50	42.50	42.50



O&M Claimed	10.71	11.05	11.48	11.86	12.28
DOUBLE CIRCUIT (SINGLE CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.377	0.391	0.404	0.419	0.433
No. of Units - (Length in KM)	2.11	2.11	2.11	2.11	2.11
O&M Claimed	0.80	0.83	0.85	0.88	0.91



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			
Raibarielly:ICT-II & III BAY	Conventional	220 KV			2.000								Nov 1, 2007	Y
Raibarielly:UNCHAHAH BAY I & II	Conventional	220 KV			2.000								Nov 1, 2007	Y
Raibarielly:LUCKNOW BAY I & II	Conventional	220 KV			2.000								Nov 1, 2007	Y
Raibarielly:UNCHAHAH BAY III	Conventional	220 KV			1.000								Nov 1, 2007	Y

Summary:

O&M Expenses For Substations Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
220KV SUB-STATION					
Normative Rate of O&M as per Regulation	22.51	23.30	24.12	24.96	25.84
No. of Units	7.00	7.00	7.00	7.00	7.00
O&M Claimed	157.57	163.10	168.84	174.72	180.88



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	11.51	11.88	12.33	12.74	13.19
Substation	157.57	163.10	168.84	174.72	180.88
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	169.08	174.98	181.17	187.46	194.07
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	169.08	174.98	181.17	187.46	194.07

(Petitioner)



Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	UNCHAHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAHAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 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

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Single Circuit (Single Conductor)	0.23	0.252	0.26	0.27	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.21	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.806	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.346	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.123	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.413	1.544	1.598	1.654	1.713	1.773
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	UNCHAHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAHAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 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	1,571.19	1,571.19	1,571.19	1,571.19	1,571.19
Less: Adjustment in Equity*	0.00	0.00	0.00	0.00	0.00
Adjustment during the year	0.00	0.00	0.00	0.00	0.00
Net opening equity (Normal)	1,571.19	1,571.19	1,571.19	1,571.19	1,571.19
Add: Increase in Equity due to addition during the year / period	0.00	0.00	0.00	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	0.00	0.00	0.00	0.00
Closing Normative Equity	1,571.19	1,571.19	1,571.19	1,571.19	1,571.19
Average Normative Equity	1,571.19	1,571.19	1,571.19	1,571.19	1,571.19
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	295.10	295.10	295.10	295.10	295.10
Pro rata return on Equity	295.10	295.10	295.10	295.10	295.10

(Petitioner)



Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	UNCHA HAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHA HAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 1, 2007

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
BOND XXI -DE-CAP					
Gross Loan- Opening	-239.00	-239.00	-239.00	-239.00	-239.00
Cumulative repayments of Loans upto previous year	-179.25	-199.17	-219.08	-239.00	-239.00
Net loan-Opening	-59.75	-39.83	-19.92	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	-19.92	-19.92	-19.92	0.00	0.00
Net Loan-Closing	-39.83	-19.91	0.00	0.00	0.00
Average Net Loan	-49.79	-29.87	-9.96	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.73	8.73	8.73	8.73	8.73
Interest on loan	-4.3467	-2.6077	-0.8695	0.00	0.00

BOND XXI -DOCO					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Loan- Opening	239.00	239.00	239.00	239.00	239.00
Cumulative repayments of Loans upto previous year	179.25	199.17	219.08	239.00	239.00
Net loan-Opening	59.75	39.83	19.92	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	19.92	19.92	19.92	0.00	0.00
Net Loan-Closing	39.83	19.91	0.00	0.00	0.00



Average Net Loan	49.79	29.87	9.96	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.73	8.73	8.73	8.73	8.73
Interest on loan	4.3467	2.6077	0.8695	0.00	0.00

BOND XXII -DE-CAP					
Gross Loan- Opening	-260.59	-260.59	-260.59	-260.59	-260.59
Cumulative repayments of Loans upto previous year	-195.44	-217.16	-238.87	-260.59	-260.59
Net loan-Opening	-65.15	-43.43	-21.72	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	-21.72	-21.72	-21.72	0.00	0.00
Net Loan-Closing	-43.43	-21.71	0.00	0.00	0.00
Average Net Loan	-54.29	-32.57	-10.86	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	-4.7124	-2.8271	-0.9426	0.00	0.00

BOND XXII -DOCO					
Gross Loan- Opening	423.00	423.00	423.00	423.00	423.00
Cumulative repayments of Loans upto previous year	317.25	352.50	387.75	423.00	423.00
Net loan-Opening	105.75	70.50	35.25	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	35.25	35.25	35.25	0.00	0.00
Net Loan-Closing	70.50	35.25	0.00	0.00	0.00
Average Net Loan	88.13	52.88	17.63	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	7.6497	4.59	1.5303	0.00	0.00



BOND XXIV -DOCO					
Gross Loan- Opening	954.00	954.00	954.00	954.00	954.00
Cumulative repayments of Loans upto previous year	715.50	795.00	874.50	954.00	954.00
Net loan-Opening	238.50	159.00	79.50	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	79.50	79.50	79.50	0.00	0.00
Net Loan-Closing	159.00	79.50	0.00	0.00	0.00
Average Net Loan	198.75	119.25	39.75	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.95	9.95	9.95	9.95	9.95
Interest on loan	19.7756	11.8654	3.9551	0.00	0.00

BOND XXVI -DOCO					
Gross Loan- Opening	1,541.00	1,541.00	1,541.00	1,541.00	1,541.00
Cumulative repayments of Loans upto previous year	1,027.33	1,155.75	1,284.17	1,412.58	1,541.00
Net loan-Opening	513.67	385.25	256.83	128.42	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	128.42	128.42	128.42	128.42	0.00
Net Loan-Closing	385.25	256.83	128.41	0.00	0.00
Average Net Loan	449.46	321.04	192.62	64.21	0.00
Rate of Interest on Loan on Annual Basis	9.30	9.30	9.30	9.30	9.30
Interest on loan	41.7998	29.8567	17.9137	5.9715	0.00

BOND XXVII -DOCO					
Gross Loan- Opening	125.00	125.00	125.00	125.00	125.00
Cumulative repayments of Loans upto previous year	83.33	93.75	104.17	114.58	125.00
Net loan-Opening	41.67	31.25	20.83	10.42	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	10.42	10.42	10.42	10.42	0.00
Net Loan-Closing	31.25	20.83	10.41	0.00	0.00
Average Net Loan	36.46	26.04	15.62	5.21	0.00
Rate of Interest on Loan on Annual Basis	9.47	9.47	9.47	9.47	9.47
Interest on loan	3.4528	2.466	1.4792	0.4934	0.00

BOND XXVIII -DOCO

Gross Loan- Opening	408.00	408.00	408.00	408.00	408.00
Cumulative repayments of Loans upto previous year	238.00	272.00	306.00	340.00	374.00
Net loan-Opening	170.00	136.00	102.00	68.00	34.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	34.00	34.00	34.00	34.00	34.00
Net Loan-Closing	136.00	102.00	68.00	34.00	0.00
Average Net Loan	153.00	119.00	85.00	51.00	17.00
Rate of Interest on Loan on Annual Basis	9.33	9.33	9.33	9.33	9.33
Interest on loan	14.2749	11.1027	7.9305	4.7583	1.5861

BOND XXX -ADDCAP FOR 2010-2011

Gross Loan- Opening	41.22	41.22	41.22	41.22	41.22
Cumulative repayments of Loans upto previous year	20.61	24.05	27.48	30.92	34.35
Net loan-Opening	20.61	17.17	13.74	10.30	6.87
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	3.44	3.44	3.44	3.44	3.44
Net Loan-Closing	17.17	13.73	10.30	6.86	3.43
Average Net Loan	18.89	15.45	12.02	8.58	5.15



Rate of Interest on Loan on Annual Basis	8.80	8.80	8.80	8.80	8.80
Interest on loan	1.6623	1.3596	1.0578	0.755	0.4532

BOND XXX -ADDCAP FOR 2011-2012

Gross Loan- Opening	5.76	5.76	5.76	5.76	5.76
Cumulative repayments of Loans upto previous year	2.88	3.36	3.84	4.32	4.80
Net loan-Opening	2.88	2.40	1.92	1.44	0.96
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.48	0.48	0.48	0.48	0.48
Net Loan-Closing	2.40	1.92	1.44	0.96	0.48
Average Net Loan	2.64	2.16	1.68	1.20	0.72
Rate of Interest on Loan on Annual Basis	8.80	8.80	8.80	8.80	8.80
Interest on loan	0.2323	0.1901	0.1478	0.1056	0.0634

BOND XXX -ADDCAP FOR 2011-2012

Gross Loan- Opening	37.76	37.76	37.76	37.76	37.76
Cumulative repayments of Loans upto previous year	18.88	22.03	25.17	28.32	31.47
Net loan-Opening	18.88	15.73	12.59	9.44	6.29
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	3.15	3.15	3.15	3.15	3.15
Net Loan-Closing	15.73	12.58	9.44	6.29	3.14
Average Net Loan	17.31	14.16	11.02	7.87	4.72
Rate of Interest on Loan on Annual Basis	8.80	8.80	8.80	8.80	8.80
Interest on loan	1.5233	1.2461	0.9698	0.6926	0.4154

BOND XXXI -ADDCAP FOR 2011-2012



Gross Loan- Opening	15.00	15.00	15.00	15.00	15.00
Cumulative repayments of Loans upto previous year	7.50	8.75	10.00	11.25	12.50
Net loan-Opening	7.50	6.25	5.00	3.75	2.50
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	6.25	5.00	3.75	2.50	1.25
Average Net Loan	6.88	5.63	4.38	3.13	1.88
Rate of Interest on Loan on Annual Basis	8.90	8.90	8.90	8.90	8.90
Interest on loan	0.6123	0.5011	0.3898	0.2786	0.1673

BOND-XXXIV -ADDCAP FOR 2011-2012

Gross Loan- Opening	18.00	18.00	18.00	18.00	18.00
Cumulative repayments of Loans upto previous year	7.50	9.00	10.50	12.00	13.50
Net loan-Opening	10.50	9.00	7.50	6.00	4.50
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	1.50	1.50	1.50	1.50	1.50
Net Loan-Closing	9.00	7.50	6.00	4.50	3.00
Average Net Loan	9.75	8.25	6.75	5.25	3.75
Rate of Interest on Loan on Annual Basis	8.84	8.84	8.84	8.84	8.84
Interest on loan	0.8619	0.7293	0.5967	0.4641	0.3315

BOND XXXVI -ADDCAP FOR 2011-2012

Gross Loan- Opening	3.42	3.42	3.42	3.42	3.42
Cumulative repayments of Loans upto previous year	0.68	0.91	1.14	1.37	1.60
Net loan-Opening	2.74	2.51	2.28	2.05	1.82
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00



Less: Repayment(s) of loan during the year	0.23	0.23	0.23	0.23	0.23
Net Loan-Closing	2.51	2.28	2.05	1.82	1.59
Average Net Loan	2.63	2.40	2.17	1.94	1.71
Rate of Interest on Loan on Annual Basis	9.35	9.35	9.35	9.35	9.35
Interest on loan	0.2459	0.2244	0.2029	0.1814	0.1599

BOND XXXVI -ADDCAP FOR 2012-2013

Gross Loan- Opening	82.58	82.58	82.58	82.58	82.58
Cumulative repayments of Loans upto previous year	16.52	22.02	27.53	33.03	38.54
Net loan-Opening	66.06	60.56	55.05	49.55	44.04
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	5.51	5.51	5.51	5.51	5.51
Net Loan-Closing	60.55	55.05	49.54	44.04	38.53
Average Net Loan	63.31	57.81	52.30	46.80	41.29
Rate of Interest on Loan on Annual Basis	9.35	9.35	9.35	9.35	9.35
Interest on loan	5.9195	5.4052	4.8901	4.3758	3.8606

BOND XXXVIII -ADDCAP FOR 2012-2013

Gross Loan- Opening	0.76	0.76	0.76	0.76	0.76
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.76	0.76	0.76	0.76	0.76
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	0.76	0.76	0.76	0.76	0.76
Average Net Loan	0.76	0.76	0.76	0.76	0.76
Rate of Interest on Loan on Annual Basis	9.25	9.25	9.25	9.25	9.25



Interest on loan	0.0703	0.0703	0.0703	0.0703	0.0703
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BOND XXXVIII -ADDCAP FOR 2013-2014

Gross Loan- Opening	88.24	88.24	88.24	88.24	88.24
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	88.24	88.24	88.24	88.24	88.24
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	88.24	88.24	88.24	88.24	88.24
Average Net Loan	88.24	88.24	88.24	88.24	88.24
Rate of Interest on Loan on Annual Basis	9.25	9.25	9.25	9.25	9.25
Interest on loan	8.1622	8.1622	8.1622	8.1622	8.1622

BOND - XLV -ADDCAP FOR 2013-2014

Gross Loan- Opening	24.00	24.00	24.00	24.00	24.00
Cumulative repayments of Loans upto previous year	4.00	6.00	8.00	10.00	12.00
Net loan-Opening	20.00	18.00	16.00	14.00	12.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	2.00	2.00	2.00	2.00	2.00
Net Loan-Closing	18.00	16.00	14.00	12.00	10.00
Average Net Loan	19.00	17.00	15.00	13.00	11.00
Rate of Interest on Loan on Annual Basis	9.65	9.65	9.65	9.65	9.65
Interest on loan	1.8335	1.6405	1.4475	1.2545	1.0615

Summary



Gross Loan- Opening	3,507.15	3,507.15	3,507.15	3,507.15	3,507.15
Cumulative repayments of Loans upto previous year	2,264.54	2,547.96	2,831.38	3,114.78	3,305.17
Net loan-Opening	1,242.61	959.19	675.77	392.37	201.98
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	283.43	283.43	283.43	190.40	51.56
Net Loan-Closing	959.18	675.76	392.34	201.97	150.42
Average Net Loan	1,100.92	817.50	534.08	297.19	176.22
Rate of Interest on Loan on Annual Basis	9.3889	9.3679	9.3247	9.2746	9.2676
Interest on loan	103.3639	76.5825	49.8011	27.5633	16.3314

(Petitioner)



Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	UNCHA HAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHA HAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 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	3,667.15	3,667.15	3,667.15	3,667.15	3,667.15
Cumulative repayments of Normative loan upto previous year	2,624.55	2,872.70	2,977.05	3,081.40	3,185.74
Net normative loan-Opening	1,042.60	794.45	690.10	585.75	481.41
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	248.15	104.35	104.35	104.34	104.35
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	794.45	690.10	585.75	481.41	377.06
Average normative loan	918.53	742.28	637.93	533.58	429.24
Weighted Average Rate of interest on actual loan	9.3889	9.3679	9.3247	9.2746	9.2676
Interest on normative loan	86.24	69.54	59.49	49.49	39.78
Pro rata interest on normative loan	86.24	69.54	59.49	49.49	39.78

(Petitioner)



Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	UNCHAHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAHAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 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)	307.30	0.00	307.30	307.30	0.00	0.00
Civil & Building	698.74	0.00	698.74	698.74	3.34	23.34
Transmission Line	1,363.21	0.00	1,363.21	1,363.21	5.28	71.98
Sub Station	2,740.59	0.00	2,740.59	2,740.59	5.28	144.70
Comm. Sys. excluding Fiber Optic	128.50	0.00	128.50	128.50	6.33	8.13
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDISM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	5,238.34	0.00	5,238.34	5,238.34	0.00	248.15
Weighted Average Rate of Depreciation(%)					4.737188	

2020-21

Land(Freehold)	307.30	0.00	307.30	307.30	0.00	0.00
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Civil & Building	698.74	0.00	698.74	698.74	3.34	15.58
Transmission Line	1,363.21	0.00	1,363.21	1,363.21	5.28	28.62
Sub Station	2,740.59	0.00	2,740.59	2,740.59	5.28	57.54
Comm. Sys. excluding Fiber Optic	128.50	0.00	128.50	128.50	6.33	2.61
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	5,238.34	0.00	5,238.34	5,238.34	0.00	104.35
Weighted Average Rate of Depreciation(%)					1.992043	

2021-22						
Land(Freehold)	307.30	0.00	307.30	307.30	0.00	0.00
Civil & Building	698.74	0.00	698.74	698.74	3.34	15.58
Transmission Line	1,363.21	0.00	1,363.21	1,363.21	5.28	28.62
Sub Station	2,740.59	0.00	2,740.59	2,740.59	5.28	57.54
Comm. Sys. excluding Fiber Optic	128.50	0.00	128.50	128.50	6.33	2.61
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	5,238.34	0.00	5,238.34	5,238.34	0.00	104.35
Weighted Average Rate of Depreciation(%)					1.992043	



2022-23						
Land(Freehold)	307.30	0.00	307.30	307.30	0.00	0.00
Civil & Building	698.74	0.00	698.74	698.74	3.34	15.57
Transmission Line	1,363.21	0.00	1,363.21	1,363.21	5.28	28.62
Sub Station	2,740.59	0.00	2,740.59	2,740.59	5.28	57.54
Comm. Sys. excluding Fiber Optic	128.50	0.00	128.50	128.50	6.33	2.61
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/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	5,238.34	0.00	5,238.34	5,238.34	0.00	104.34
Weighted Average Rate of Depreciation(%)					1.991852	

2023-24						
Land(Freehold)	307.30	0.00	307.30	307.30	0.00	0.00
Civil & Building	698.74	0.00	698.74	698.74	3.34	15.58
Transmission Line	1,363.21	0.00	1,363.21	1,363.21	5.28	28.62
Sub Station	2,740.59	0.00	2,740.59	2,740.59	5.28	57.54
Comm. Sys. excluding Fiber Optic	128.50	0.00	128.50	128.50	6.33	2.61
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/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	5,238.34	0.00	5,238.34	5,238.34	0.00	104.35



Weighted Average Rate of Depreciation(%)					1.992043	
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(Petitioner)



Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	UNCHAHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAHAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 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	5,238.34	5,238.34	5,238.34	5,238.34	5,238.34
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	5,238.34	5,238.34	5,238.34	5,238.34	5,238.34
1.8 Average capital cost	5,238.34	5,238.34	5,238.34	5,238.34	5,238.34
1.9 Freehold land included in 1.8	307.30	307.30	307.30	307.30	307.30
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	4,931.04	4,931.04	4,931.04	4,931.04	4,931.04
1.12 Depreciable Value(1.10+90% of 1.11)	4,437.94	4,437.94	4,437.94	4,437.94	4,437.94
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	4.737188	1.992043	1.992043	1.991852	1.992043



1.14 Depreciation(for the period)	248.15	104.35	104.35	104.34	104.35
1.15 Depreciation(Annualised)	248.15	104.35	104.35	104.34	104.35
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	2,624.54	2,872.69	2,977.04	3,081.39	3,185.73
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	2,872.69	2,977.04	3,081.39	3,185.73	3,290.08

(Petitioner)



Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	UNCHAHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAHAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 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	14.09	14.58	15.10	15.62	16.17
Maintenance spares 15% of O&M Expenses	25.36	26.25	27.18	28.12	29.11
Receivables equivalent to 45 days of AFC	100.25	81.08	80.51	80.06	79.71
Total Working capital	139.70	121.91	122.79	123.80	124.99
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	16.83	13.71	12.89	13.00	15.00
Pro rata interest on working capital	16.83	13.71	12.89	13.00	15.00

(Petitioner)



Summary of Tariff

Form No. - 1

Encl-3

Name of the Transmission Licensee:	Power Grid Corporation of India Limited		
Project	UNCHAHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAHAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 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	104.34	104.36	104.34	104.37	104.34
Interest on Loan-Form No. 9E	30.16	20.50	10.82	3.01	0.00
Return on Equity-Form No. 8	295.10	295.10	295.10	295.10	295.10
Int. on Working capital-Form No.11	13.11	13.32	13.55	13.80	14.19
Op. and maintenance-Form No.2	155.93	164.08	172.72	181.81	191.32
Total AFC	598.64	597.36	596.53	598.09	604.95

(Petitioner)



Name of the Transmission Licensee	Power Grid Corporation of India Limited	
Project	UNCHAHAH STAGE -III Transmission System	
Element Description	Combined Assets under UNCHAHAH-III Transmission System. Notional DOCO:	
Region	Northern Region	DOCO Date Nov 1, 2007

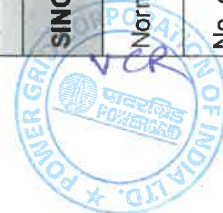
1. Transmission Lines

(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 D/C UNCHAHAH LUCKNOW at RAIBARIELLY	AC	DC	1	220 KV	0.000	0.000	2.110	Nov 1, 2007	Y	
UNCHAHAH RAIBREILLY at RAIBARIELLY	AC	SC	1	220 KV	0.000	0.000	42.500	Nov 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 (SINGLE CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.246	0.259	0.272	0.287	0.302
No. of Units - (Length in KM)	42.50	42.50	42.50	42.50	42.50



O&M Claimed	10.46	11.01	11.56	12.20	12.84
DOUBLE CIRCUIT (SINGLE CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.369	0.388	0.409	0.43	0.453
No. of Units - (Length in KM)	2.11	2.11	2.11	2.11	2.11
O&M Claimed	0.78	0.82	0.86	0.91	0.96



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				
Raibarielly:ICT-II & III BAY	Conventional	220 KV			2.000								Nov 1, 2007	Y	
Raibarielly:UNCHAHAH BAY I & II	Conventional	220 KV			2.000									Nov 1, 2007	Y
Raibarielly:LUCKNOW BAY I & II	Conventional	220 KV			2.000									Nov 1, 2007	Y
Raibarielly:UNCHAHAH BAY III	Conventional	220 KV			1.000									Nov 1, 2007	Y

Summary:

O&M Expenses For Substations Covered in the instant petition		2024-25	2025-26	2026-27	2027-28	2028-29
220KV SUB-STATION						
Normative Rate of O&M as per Regulation		20.67	21.75	22.90	24.10	25.36
No. of Units		7.00	7.00	7.00	7.00	7.00
O&M Claimed		144.69	152.25	160.30	168.70	177.52



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	11.24	11.83	12.42	13.11	13.80
Substation	144.69	152.25	160.30	168.70	177.52
Communication System	0.00	0.00	0.00	0.00	0.00
Total Normative O&M	155.93	164.08	172.72	181.81	191.32
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	155.93	164.08	172.72	181.81	191.32

(Petitioner)



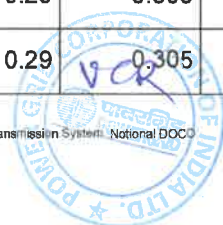
Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	UNCHAHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAHAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 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	UNCHAHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAHAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 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	1,571.19	1,571.19	1,571.19	1,571.19	1,571.19
Less: Adjustment in Equity*	0.00	0.00	0.00	0.00	0.00
Adjustment during the year	0.00	0.00	0.00	0.00	0.00
Net opening equity (Normal)	1,571.19	1,571.19	1,571.19	1,571.19	1,571.19
Add: Increase in Equity due to addition during the year / period	0.00	0.00	0.00	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	0.00	0.00	0.00	0.00	0.00
Closing Normative Equity	1,571.19	1,571.19	1,571.19	1,571.19	1,571.19
Average Normative Equity	1,571.19	1,571.19	1,571.19	1,571.19	1,571.19
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	295.10	295.10	295.10	295.10	295.10
Return on Equity	295.10	295.10	295.10	295.10	295.10



Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	UNCHAHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAHAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 1, 2007

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
BOND XXI -DE-CAP					
Gross Loan- Opening	-239.00	-239.00	-239.00	-239.00	-239.00
Cumulative repayments of Loans upto previous year	-239.00	-239.00	-239.00	-239.00	-239.00
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	8.73	8.73	8.73	8.73	8.73
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XXI -DOCO					
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Gross Loan- Opening	239.00	239.00	239.00	239.00	239.00
Cumulative repayments of Loans upto previous year	239.00	239.00	239.00	239.00	239.00
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	8.73	8.73	8.73	8.73	8.73
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XXII -DE-CAP					
Gross Loan- Opening	-260.59	-260.59	-260.59	-260.59	-260.59
Cumulative repayments of Loans upto previous year	-260.59	-260.59	-260.59	-260.59	-260.59
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

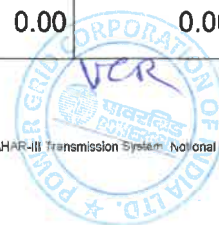
BOND XXII -DOCO					
Gross Loan- Opening	423.00	423.00	423.00	423.00	423.00
Cumulative repayments of Loans upto previous year	423.00	423.00	423.00	423.00	423.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	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 XXIV -DOCO					
Gross Loan- Opening	954.00	954.00	954.00	954.00	954.00
Cumulative repayments of Loans upto previous year	954.00	954.00	954.00	954.00	954.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.95	9.95	9.95	9.95	9.95
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XXVI -DOCO					
Gross Loan- Opening	1,541.00	1,541.00	1,541.00	1,541.00	1,541.00
Cumulative repayments of Loans upto previous year	1,541.00	1,541.00	1,541.00	1,541.00	1,541.00
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	9.30	9.30	9.30	9.30	9.30
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XXVII -DOCO					
Gross Loan- Opening	125.00	125.00	125.00	125.00	125.00
Cumulative repayments of Loans upto previous year	125.00	125.00	125.00	125.00	125.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00



Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	9.47	9.47	9.47	9.47	9.47
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND XXVIII -DOCO					
Gross Loan- Opening	408.00	408.00	408.00	408.00	408.00
Cumulative repayments of Loans upto previous year	408.00	408.00	408.00	408.00	408.00
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 XXX -ADDCAP FOR 2010-2011					
Gross Loan- Opening	41.22	41.22	41.22	41.22	41.22
Cumulative repayments of Loans upto previous year	37.79	41.22	41.22	41.22	41.22
Net loan-Opening	3.43	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	3.44	0.00	0.00	0.00	0.00
Net Loan-Closing	-0.01	0.00	0.00	0.00	0.00
Average Net Loan	1.71	0.00	0.00	0.00	0.00



Rate of Interest on Loan on Annual Basis	8.80	8.80	8.80	8.80	8.80
Interest on loan	0.1505	0.00	0.00	0.00	0.00

BOND XXX -ADDCAP FOR 2011-2012

Gross Loan- Opening	5.76	5.76	5.76	5.76	5.76
Cumulative repayments of Loans upto previous year	5.28	5.76	5.76	5.76	5.76
Net loan-Opening	0.48	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	0.48	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.24	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.80	8.80	8.80	8.80	8.80
Interest on loan	0.0211	0.00	0.00	0.00	0.00

BOND XXX -ADDCAP FOR 2011-2012

Gross Loan- Opening	37.76	37.76	37.76	37.76	37.76
Cumulative repayments of Loans upto previous year	34.61	37.76	37.76	37.76	37.76
Net loan-Opening	3.15	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	3.15	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	1.58	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.80	8.80	8.80	8.80	8.80
Interest on loan	0.139	0.00	0.00	0.00	0.00

BOND XXXI -ADDCAP FOR 2011-2012


Gross Loan- Opening	15.00	15.00	15.00	15.00	15.00
Cumulative repayments of Loans upto previous year	13.75	15.00	15.00	15.00	15.00
Net loan-Opening	1.25	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	1.25	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.63	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.90	8.90	8.90	8.90	8.90
Interest on loan	0.0561	0.00	0.00	0.00	0.00

BOND-XXXIV -ADDCAP FOR 2011-2012

Gross Loan- Opening	18.00	18.00	18.00	18.00	18.00
Cumulative repayments of Loans upto previous year	15.00	16.50	18.00	18.00	18.00
Net loan-Opening	3.00	1.50	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	1.50	1.50	0.00	0.00	0.00
Net Loan-Closing	1.50	0.00	0.00	0.00	0.00
Average Net Loan	2.25	0.75	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	8.84	8.84	8.84	8.84	8.84
Interest on loan	0.1989	0.0663	0.00	0.00	0.00

BOND XXXVI -ADDCAP FOR 2011-2012

Gross Loan- Opening	3.42	3.42	3.42	3.42	3.42
Cumulative repayments of Loans upto previous year	1.82	2.05	2.28	2.51	2.74
Net loan-Opening	1.60	1.37	1.14	0.91	0.68
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00



Less: Repayment(s) of loan during the year	0.23	0.23	0.23	0.23	0.23
Net Loan-Closing	1.37	1.14	0.91	0.68	0.45
Average Net Loan	1.49	1.26	1.03	0.80	0.57
Rate of Interest on Loan on Annual Basis	9.35	9.35	9.35	9.35	9.35
Interest on loan	0.1393	0.1178	0.0963	0.0748	0.0533

BOND XXXVI -ADDCAP FOR 2012-2013

Gross Loan- Opening	82.58	82.58	82.58	82.58	82.58
Cumulative repayments of Loans upto previous year	44.04	49.55	55.05	60.56	66.06
Net loan-Opening	38.54	33.03	27.53	22.02	16.52
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	5.51	5.51	5.51	5.51	5.51
Net Loan-Closing	33.03	27.52	22.02	16.51	11.01
Average Net Loan	35.79	30.28	24.78	19.27	13.77
Rate of Interest on Loan on Annual Basis	9.35	9.35	9.35	9.35	9.35
Interest on loan	3.3464	2.8312	2.3169	1.8017	1.2875

BOND XXXVIII -ADDCAP FOR 2012-2013

Gross Loan- Opening	0.76	0.76	0.76	0.76	0.76
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.76	0.76
Net loan-Opening	0.76	0.76	0.76	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	0.76	0.00	0.00
Net Loan-Closing	0.76	0.76	0.00	0.00	0.00
Average Net Loan	0.76	0.76	0.38	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	0.0703	0.0703	0.0352	0.00	0.00
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BOND XXXVIII -ADDCAP FOR 2013-2014

Gross Loan- Opening	88.24	88.24	88.24	88.24	88.24
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	88.24	88.24
Net loan-Opening	88.24	88.24	88.24	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	88.24	0.00	0.00
Net Loan-Closing	88.24	88.24	0.00	0.00	0.00
Average Net Loan	88.24	88.24	44.12	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	8.1622	8.1622	4.0811	0.00	0.00

BOND - XLV -ADDCAP FOR 2013-2014

Gross Loan- Opening	24.00	24.00	24.00	24.00	24.00
Cumulative repayments of Loans upto previous year	14.00	16.00	18.00	20.00	22.00
Net loan-Opening	10.00	8.00	6.00	4.00	2.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	2.00	2.00	2.00	2.00	2.00
Net Loan-Closing	8.00	6.00	4.00	2.00	0.00
Average Net Loan	9.00	7.00	5.00	3.00	1.00
Rate of Interest on Loan on Annual Basis	9.65	9.65	9.65	9.65	9.65
Interest on loan	0.8685	0.6755	0.4825	0.2895	0.0965

Summary



Gross Loan- Opening	3,507.15	3,507.15	3,507.15	3,507.15	3,507.15
Cumulative repayments of Loans upto previous year	3,356.70	3,374.25	3,383.48	3,480.22	3,487.95
Net loan-Opening	150.45	132.90	123.67	26.93	19.20
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	17.56	9.24	96.74	7.74	7.74
Net Loan-Closing	132.89	123.66	26.93	19.19	11.46
Average Net Loan	141.69	128.29	75.31	23.07	15.34
Rate of Interest on Loan on Annual Basis	9.2824	9.294	9.3108	9.3888	9.3696
Interest on loan	13.1523	11.9233	7.012	2.166	1.4373

(Petitioner)



Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	UNCHAHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAHAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 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	3,667.15	3,667.15	3,667.15	3,667.15	3,667.15
Cumulative repayments of Normative loan upto previous year	3,290.09	3,394.43	3,498.79	3,603.13	3,667.15
Net normative loan-Opening	377.06	272.72	168.36	64.02	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	104.34	104.36	104.34	64.02	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	272.72	168.36	64.02	0.00	0.00
Average normative loan	324.89	220.54	116.19	32.01	0.00
Weighted Average Rate of interest on actual loan	9.2824	9.294	9.3108	9.3888	9.3696
Interest on normative loan	30.16	20.50	10.82	3.01	0.00
Pro rata interest on normative loan	30.16	20.50	10.82	3.01	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	UNCHAHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAHAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 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)	307.30	0.00	307.30	307.30	0.00	0.00
Civil & Building	698.74	0.00	698.74	698.74	3.34	15.57
Transmission Line	1,363.21	0.00	1,363.21	1,363.21	5.28	28.62
Sub Station	2,740.59	0.00	2,740.59	2,740.59	5.28	57.54
Comm. Sys. excluding Fiber Optic	128.50	0.00	128.50	128.50	15.00	2.61
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	5,238.34	0.00	5,238.34	5,238.34	0.00	104.34
Weighted Average Rate of Depreciation(%)					1.991852	

2025-26

Land(Freehold)	307.30	0.00	307.30	307.30	0.00	0.00
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Civil & Building	698.74	0.00	698.74	698.74	3.34	15.58
Transmission Line	1,363.21	0.00	1,363.21	1,363.21	5.28	28.62
Sub Station	2,740.59	0.00	2,740.59	2,740.59	5.28	57.55
Comm. Sys. excluding Fiber Optic	128.50	0.00	128.50	128.50	15.00	2.61
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	5,238.34	0.00	5,238.34	5,238.34	0.00	104.36
Weighted Average Rate of Depreciation(%)					1.992234	

2026-27						
Land(Freehold)	307.30	0.00	307.30	307.30	0.00	0.00
Civil & Building	698.74	0.00	698.74	698.74	3.34	15.57
Transmission Line	1,363.21	0.00	1,363.21	1,363.21	5.28	28.62
Sub Station	2,740.59	0.00	2,740.59	2,740.59	5.28	57.54
Comm. Sys. excluding Fiber Optic	128.50	0.00	128.50	128.50	15.00	2.61
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	5,238.34	0.00	5,238.34	5,238.34	0.00	104.34
Weighted Average Rate of Depreciation(%)					1.991852	



2027-28						
Land(Freehold)	307.30	0.00	307.30	307.30	0.00	0.00
Civil & Building	698.74	0.00	698.74	698.74	3.34	15.58
Transmission Line	1,363.21	0.00	1,363.21	1,363.21	5.28	28.63
Sub Station	2,740.59	0.00	2,740.59	2,740.59	5.28	57.55
Comm. Sys. excluding Fiber Optic	128.50	0.00	128.50	128.50	15.00	2.61
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	5,238.34	0.00	5,238.34	5,238.34	0.00	104.37
Weighted Average Rate of Depreciation(%)					1.992425	

2028-29						
Land(Freehold)	307.30	0.00	307.30	307.30	0.00	0.00
Civil & Building	698.74	0.00	698.74	698.74	3.34	15.57
Transmission Line	1,363.21	0.00	1,363.21	1,363.21	5.28	28.62
Sub Station	2,740.59	0.00	2,740.59	2,740.59	5.28	57.54
Comm. Sys. excluding Fiber Optic	128.50	0.00	128.50	128.50	15.00	2.61
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	5,238.34	0.00	5,238.34	5,238.34	0.00	104.34



Weighted Average Rate of Depreciation(%)					1.991852	
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(Petitioner)



Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	UNCHAHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAHAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 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	5,238.34	5,238.34	5,238.34	5,238.34	5,238.34
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	5,238.34	5,238.34	5,238.34	5,238.34	5,238.34
1.8 Average capital cost	5,238.34	5,238.34	5,238.34	5,238.34	5,238.34
1.9 Freehold land included in 1.8	307.30	307.30	307.30	307.30	307.30
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	4,931.04	4,931.04	4,931.04	4,931.04	4,931.04
1.12 Depreciable Value(1.10+90% of 1.11)	4,437.94	4,437.94	4,437.94	4,437.94	4,437.94
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	1.991852	1.992234	1.991852	1.992425	1.991852



1.14 Depreciation(for the period)	104.34	104.36	104.34	104.37	104.34
1.15 Depreciation(Annualised)	104.34	104.36	104.34	104.37	104.34
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	3,290.08	3,394.42	3,498.78	3,603.12	3,707.49
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	3,394.42	3,498.78	3,603.12	3,707.49	3,811.83

(Petitioner)



Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	UNCHAHAR STAGE -III Transmission System		
Element Description	Combined Assets under UNCHAHAR-III Transmission System. Notional DOCO:		
Region	Northern Region	DOCO Date	Nov 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	12.99	13.67	14.39	15.15	15.94
Maintenance spares 15% of O&M Expenses	23.39	24.61	25.91	27.27	28.70
Receivables equivalent to 45 days of AFC	73.80	73.65	73.54	73.54	74.58
Total Working capital	110.18	111.93	113.84	115.96	119.22
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	13.11	13.32	13.55	13.80	14.19
Pro rata interest on working capital	13.11	13.32	13.55	13.80	14.19

(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	Unchahar-III Transmission System
5. Investment Approval date	
6. SCOD of the Project	
7. Actual COD of the project	01.11.2007
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	73.46 Crore
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.	52.38 Crore
15. No. of Assets covered in instant petition and having cost overrun.	NIL

16 **Prayer in brief**

17 **Key details and any Specific issue involved:**
1) There is No add-cap in 2019-24 and 2024-29

18 **Respondents**

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)



PART-III

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	Unchahar-III Transmission System
COD of the Project (if entire scope of project is completed)	01.11.2007

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.		ii) Summary of Actual / Projected Capital Cost																
S. No.	Asset No.	COD	Cut-off Date	i) Appropriated 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					
1	Combined Asset	01.11.2007	31.03.2010	7346	4	5	6	7	8	9	10	-	5238.34	5238.34	5238.34	12		
Total Capital Cost Claimed				7346		5238.34	-	0	0	0	0	-	5238.34	5238.34	5238.34			

B) Summary of Annual Fixed Cost (AFC) claimed for all the assets covered in the instant petition.		Asset Name and its location											
S. No.	Asset No.	2024-25	2025-26	2026-27	2027-28	2028-29	Capital Cost as on cutoff date						
1	Combined Asset	598.64	597.36	596.53	598.09	604.95	604.95						
		Total AFC for all the Assets											
		598.64	597.36	596.53	598.09	604.95	604.95						

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)



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	✓
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	✓
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	✓
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.

