CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 273/TT/2020

Coram:

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

Date of Order: 10.01.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and determination of transmission tariff from COD to 31.3.2024 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of 1x100 MVA, 220/132 kV ICT-III at Sitarganj Sub-station (100 MVA ICT shifted from Raebareli) under "Augmentation of Transformation Capacity at Raebareli and Sitarganj 220/132 kV Sub-stations.

And in the matter of:

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

Vs.

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 - 302 017.

3. Jaipur Vidyut Vitran Nigam Limited,
   132 kV, GSS RVPNL Sub-station Building,
   Caligiri Road, Malviya Nagar,
   Jaipur - 302 017.

4. Jodhpur Vidyut Vitran Nigam Limited,
   132 KV, GSS RVPNL Sub-station Building,
   Caligiri Road, Malviya Nagar,
   Jaipur - 302 017.

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 - 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
    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 - 110 002. **….Respondents**

For Petitioner : Shri S.S. Raju, PGCIL
Shri A.K. Verma, PGCIL
Shri D.K Biswal, PGCIL
Shri Ved Prakash Rastogi, PGCIL

For Respondents : None

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, a deemed transmission licensee, for determination of transmission tariff for the period from COD 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 1x100 MVA, 220/132 kV ICT-III at Sitarganj Sub-station (100 MVA ICT shifted from Raebareli) under "Augmentation of Transformation capacity at Raebareli and Sitarganj 220/132 kV Sub-station" in Northern Region (hereinafter referred to as "the transmission project").

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

"1) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.

2) Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para –9 above.

3) Allow the de-capitalization of 100 MVA, 220/132 kV ICT-II at Raibareilly from Unchahar-III Transmission System and re-capitalization under instant project 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.

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 Regulation 2019 as per para 8 above for respective block.

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) 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) 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 beneficiaries.

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 8.8 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.

11) Allow interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.

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) Investment Approval (IA) for the transmission project was accorded by Board of Directors of the Petitioner's Company vide Memorandum No. C/CP/IA/Raebareli and Sitarganj dated 21.3.2017, at an estimated cost of ₹2917 lakh including IDC of ₹179 lakh based on December 2016 price level.

(b) The scope of the transmission project was discussed and in-principle approval was accorded in the 37th Standing Committee Meeting of Transmission Planning of NR held on 20.1.2016 and in the 39th meeting of the Standing Committee on Power System Planning of Northern Region held on 29-30.5.2017 respectively. The transmission scheme was approved in 38th NRPC meeting held on 25.10.2016.

(c) The scope of work covered under the transmission project is as follows:

Sub-stations

a) Replacement of 2x100 MVA, 220/132 kV ICTs by 2x200 MVA, 220/132 kV ICTs at Raebareli Sub-station;
b) Extension of 220/132 kV Sitarganj Sub-station,

220 kV

100 MVA 220/132 kV transformer	: 1 Number
ICT bays	: 1 Number

132

ICT bays	: 1 Number

(d) The Petitioner had earlier claimed truing up of the tariff of 2009-14 period and determination of tariff of 2014-19 period in respect of two number of assets including the subject asset i.e. 1x100 MVA, 220/132 kV ICT-III at

Sitarganj Sub-station (100 MVA ICT shifted from Raebareli) in Petition No. 428/TT/2014 and the Commission vide order dated 28.1.2016 allowed the tariff for the same.

(e) The Petitioner filed Petition No. 160/TT/2018 for determination of transmission tariff from COD to 31.3.2019 in respect of two number of assets i.e. replacement of (i) 1x100 MVA, 220/132 kV ICT-II by 1 x 200 MVA, 220/132 kV ICT-II at Raebareli Sub-station, and (ii) replacement of 1 x 100 MVA, 220/132 kV ICT-III by 1 x 200 MVA, 220/132 kV ICT-III at Raebareli Sub-station under the transmission project which also includes the subject asset i.e. 1x100 MVA, 220/132 kV ICT-III at Sitarganj Sub-station (100 MVA ICT shifted from Raebareli)

(f) The Commission vide order dated 12.12.2018 in Petition No. 160/TT/2018 with regard to de-capitalization and re-capitalization of the subject asset observed as follows:

> *"34. We have examined the matter. As stated earlier, the petitioner has submitted the statement of de-capitalization. The petitioner has replaced the 2 x 100 MVA ICTs at Raebareli S/S with higher capacity of 2 x 200 MVA ICTs. One replaced ICT is to be installed at Sitarganj (Powergrid) sub-station and the other is to be used a regional spare. In case of shifting of assets from one transmission project to another transmission project, we are of the view that the replaced asset should be de-capitalized in the books of the account of the transmission system from where it is transferred and should be capitalised in the books of accounts of the transmission system where it is shifted. Hence, the original book values of Asset-I and Asset-II i.e., ₹376.45 lakh and ₹372.96 lakh respectively, is being taken out from the capital costs on COD in the present petition. This approach is in harmony with the decisions involving similar issues already taken up vide Commission's Orders dated 28.9.2017 in Petition No 195/TT/2016, Order dated 22.11.2017 in Petition No 208/TT/2016, and Order dated 31.10.2017 in Petition No 200/TT/2016*."

(g) The Petitioner filed Petition No. 119/TT/2020 wherein it submitted the information with regard to actual date of removal and de-capitalized value of the subject asset. Based on the information submitted by the Petitioner, the Commission vide paragraph 45 of order dated 17.10.2021 in Petition No. 119/TT/2020 with reference to de-capitalization/ shifting of subject asset, observed that the actual date of removal of subject ICT is 25.1.2018 and the Petitioner has de-capitalized ₹376.45 lakh in respect of the said ICT.

(h) It is pertinent to mention here that in the instant petition, the Petitioner has submitted that the subject asset i.e. 1x100 MVA 220/132 kV ICT-III at Sitarganj Sub-station has been shifted from Raebareli Sub-station. There seems to be a discrepancy in the nomenclature of the subject asset as the Commission vide paragraph 37 of the order dated 17.10.2021 in Petition No. 119/TT/2020 has recorded the submissions of the Petitioner wherein it is stated that ICT-II was shifted from Raebareli to Sitarganj Sub-station and its re-capitalization is being claimed in the current petition. Since in the present petition, the Petitioner has given the nomenclature of the subject asset as ICT-III, we are, therefore, referring the subject asset as ICT-III wherever the context so requires.

(i) In the instant petition, the Petitioner has claimed separate transmission tariff for (i) associated bays and elements excluding ICT-III, and (ii) re-capitalization of ICT-III only based on de-capitalization and re-capitalization. The Petitioner has bifurcated the subject asset into Asset-I(a) and Asset-I(b) whose description is as follows:

Asset	Assets	COD
Asset I(a)	Associated bays and elements of 1x100 MVA 220/132 kV for ICT-III at Sitarganj Sub-station (Excluding ICT)	29.6.2019
Asset I(b)	1x100 MVA 220/132 kV ICT-III at Sitarganj Sub-station (Only ICT)	1.11.2007 (actual) 29.6.2019 (re-capitalization date)

(j) Asset-I(a) and Asset-I(b) as described above, hereinafter have been jointly referred to as “the transmission assets”.

(k) The Petitioner has submitted that entire scope of the transmission project is complete and status of the tariff petitions in respect of the transmission assets covered under the transmission project is as follows:

Sl. No.	Particulars	COD	Petition No.
1	Replacement of 1X100 MVA, 220/132 kV ICT-II by 1X200 MVA, 220/132 kV ICT-II at Raebareli Sub-station.	19.2.2018	160/TT/2018
2	Replacement of 1X100 MVA, 220/132 kV ICT-III by 1X200 MVA, 220/132 kV ICT-III at Raebareli Sub-station.	1.12.2017	
3	1X100 MVA, 220/132 kV ICT-III at Sitarganj Sub-station (100 MVA ICT shifted from Raebareli)	29.6.2019	Present petition

4. The Annual Fixed Charges (AFC) claimed by the Petitioner in respect of the transmission assets for 2019-24 tariff period are as follows:

(₹ in lakh)

Asset-I (a)	2019-20 (Pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	10.07	20.01	24.18	25.85	25.85
Interest on Loan	10.73	20.29	23.04	22.80	20.66
Return on Equity	10.75	21.35	25.81	27.59	27.59
O&M Expenses	29.21	39.94	41.35	42.79	44.30
Interest on working capital	1.75	2.67	2.91	3.02	3.05
Total	**62.51**	**104.26**	**117.29**	**122.05**	**121.45**

(₹ in lakh)

Asset-I (b)	2019-20 (Pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	15.05	9.78	9.78	9.78	9.78
Interest on Loan	5.61	6.25	5.32	4.40	3.49
Return on Equity	16.05	21.21	21.21	21.21	21.21
O&M Expenses	18.54	25.40	26.30	27.20	28.20
Interest on working capital	1.36	1.67	1.70	1.72	1.75
Total	56.61	64.31	64.31	64.31	64.43

5. The details of IWC claimed by the Petitioner in respect of the transmission assets is as follows:

(₹ in lakh)

Asset-I (a)	2019-20 (Pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
O&M Expenses	3.22	3.33	3.45	3.57	3.69
Maintenance Spares	5.79	5.99	6.20	6.42	6.65
Receivables	10.15	12.85	14.46	15.05	14.93

Total	**19.16**	**22.17**	**24.11**	**25.04**	**25.27**
Rate of Interest (in %)	12.05%	12.05%	12.05%	12.05%	12.05%
Interest on Working Capital	**1.75**	**2.67**	**2.91**	**3.02**	**3.05**

(₹ in lakh)

Asset-I (b)	**2019-20 (Pro-rata 277 days)**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
O&M Expenses	2.04	2.12	2.19	2.27	2.35
Maintenance Spares	3.68	3.81	3.95	4.08	4.23
Receivables	9.20	7.93	7.93	7.93	7.92
Total	**14.92**	**13.86**	**14.07**	**14.28**	**14.50**
Rate of Interest (in %)	12.05%	12.05%	12.05%	12.05%	12.05%
Interest on Working Capital	**1.36**	**1.67**	**1.70**	**1.72**	**1.75**

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

7. The Petitioner has served the petition on the Respondents and notice of this application has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. None of the Respondents have filed their reply.

8. The hearing in this matter was held on 22.6.2021 through video conference and order was reserved.

9. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition. This order is issued considering the submissions made by the Petitioner in the petition vide affidavits dated 7.1.2020 and 14.6.2021.

Date of Commercial Operation

10. Regulation 5 of the 2019 Tariff Regulations provides as follows:

"5. Date of Commercial Operation: (1) The date of commercial operation of a generating station or unit thereof or a transmission system or element thereof and associated communication system shall be determined in accordance with the provisions of the Grid Code.

(2) In case the transmission system or element thereof executed by a transmission licensee is ready for commercial operation but the interconnected generating station or the transmission system of other transmission licensee as per the agreed project implementation schedule is not ready for commercial operation, the transmission licensee may file petition before the Commission for approval of the date of commercial operation of such transmission system or element thereof:

Provided that the transmission licensee seeking the approval of the date of commercial operation under this clause shall give prior notice of at least one month, to the generating company or the other transmission licensee and the long term customers of its transmission system, as the case may be, regarding the date of commercial operation:

Provided further that the transmission licensee seeking the approval of the date of commercial operation of the transmission system under this clause shall be required to submit the following documents along with the petition:

(a) Energisation certificate issued by the Regional Electrical Inspector under Central Electricity Authority;
(b) Trial operation certificate issued by the concerned RLDC for charging element with or without electrical load;
(c) Implementation Agreement, if any, executed by the parties;
(d) Minutes of the coordination meetings or related correspondences regarding the monitoring of the progress of the generating station and transmission systems;
(e) Notice issued by the transmission licensee as per the first proviso under this clause and the response;
(f) Certificate of the CEO or MD of the company regarding the completion of the transmission system including associated communication system in all respects.

(3) The date of commercial operation in case of integrated mine(s), shall mean the earliest of —

a) the first date of the year succeeding the year in which 25% of the Peak Rated Capacity as per the Mining Plan is achieved; or
b) the first date of the year succeeding the year in which the value of production estimated in accordance with Regulation 7A of these regulations, exceeds total expenditure in that year; or
c) the date of two years from the date of commencement of production:

Provided that on earliest occurrence of any of the events under sub-clauses (a) to (c) of Clause (3) of this Regulation, the generating company shall declare the date of *commercial operation of the integrated mine(s) under the relevant sub-clause with one week prior intimation to the beneficiaries of the end-use or associated generating station(s);*

Provided further that in case the integrated mine(s) is ready for commercial operation but is prevented from declaration of the date of commercial operation for reasons not attributable to the generating company or its suppliers or contractors or the Mine Developer and Operator, the Commission, on an application made by the generating company, may approve such other date as the date of commercial operation as may be considered appropriate after considering the relevant reasons that prevented the declaration of the date of commercial operation under any of the sub-clauses of Clause (3) of this Regulation;

Provided also that the generating company seeking the approval of the date of commercial operation under the preceding proviso shall give prior notice of one month to the beneficiaries of the end-use or associated generating station(s) of the integrated mine(s) regarding the date of commercial operation."

11. The Petitioner has claimed COD in respect of the transmission assets under Regulation 5 of the 2019 Tariff Regulations as per the following details:

Particulars	**SCOD of the transmission assets**	**Completion of trial run**	**COD of the transmission assets**
Asset-I(a)	20.3.2019	28.6.2019	29.6.2019
Asset-I(b)	-	-	29.6.2019

12. The Petitioner has claimed separate tariff in respect of Asset-I(a) and submitted Auditor's certificate and tariff forms in support of its claim. The Petitioner has further submitted that cost of ICT-III has been de-capitalized under "Unchahar-III Transmission System" in Petition No. 119/TT/2020 and has been re-capitalized under the transmission project i.e. Augmentation of Transformation Capacity at Raebareli and Sitarganj. The Petitioner has submitted that tariff for ICT-III is being claimed in the current petition in line with the Auditor's certificate dated 14.10.2019 and Form 10B (Statement of de-capitalization). The Petitioner has prayed to allow the tariff for Asset-I(a) along with tariff of Asset-I(b) as claimed in the present petition as the cost

of the transmission assets has been de-capitalized from the old project i.e. "Unchahar-III Transmission System".

13. In support of COD of the transmission assets, the Petitioner has submitted CEA Energisation Certificate dated 19.6.2019, RLDC certificate dated 30.7.2018 and CMD certificate in accordance with Regulation 5 of the 2019 Regulations.

14. We have considered the submissions of the Petitioner. Taking into consideration CEA Energisation Certificate dated 19.6.2019, RLDC certificate dated 30.7.2018 and CMD Certificate, COD of the transmission assets is approved as 29.6.2019. Asset-I(a), which has been installed at Sitarganj, consists of associated bays and elements for installation of ICT and, accordingly, it has to be serviced from 29.6.2019. However, Asset-I(b), the ICT-III shifted from Raebareli, is an existing asset for which the Commission had already approved COD as 1.11.2007 vide order dated 30.6.2009 in Petition No. 170/2008.

15. The Commission vide order dated 12.12.2018 in Petition No. 160/TT/2018 observed as follows:

> *"28. The Petitioner has submitted in the scope of works that the 2x200 MVA ICTs have replaced the existing 2x100 MVA ICTs at Raebareli. The tariff for the replaced 2x100 MVA ICTs at Raebareli was trued up Petition No. 428/TT/2014 under Unchahar-III Transmission System. After replacement, these 2x100 MVA ICTs shall be utilized as agreed in the relevant SCM & RPC of Northern Region and the details are as mentioned below:*

Sl. No.	***Replaced Assets***	***Utilization***
1	*1x100 MVA ICT at Raebareli*	*Shall be installed at Sitarganj 220/132 kV Sub-Station*
2	*1x100 MVA ICT at Raebareli*	*Shall be utilized as Regional Spare*

16. Asset-1(b) which has already been granted tariff since 1.11.2007 has completed around 12 years of its useful life. Taking into consideration the submission of the Petitioner for claiming separate tariff for Asset-I(a) and Asset-I(b) and the fact that their remaining useful life is not the same, separate tariff is allowed for them.

17. The Commission vide order dated 17.10.2021 in Petition No. 119/TT/2020 has given the details of de-capitalization and the same is extracted as follows:

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

(₹ in lakh)

Work/ equipment proposed to be de-capitalized	*Year of capitalization of asset/ equipment being de-capitalized*	*Original Book value of the asset being de-capitalized*	*Debt:Equity Ratio at the time of capitalization*	*Cumulative depreciation corresponding to de-capitalization*	*Cumulative repayment of loan*	*Actual date of removal*
1x100 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*

…"

18. Based on the above details, we have considered the cumulative depreciation and cumulative repayment of loan corresponding to de-capitalization for the computation of tariff in respect of Asset-I(b) in the current petition.

Capital Cost

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

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

(2) The Capital Cost of a new project shall include the following:
(a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;

(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
(c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
(d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
(e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;
(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
(h) Adjustment of revenue earned by the transmission licensee by using the 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 upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway.
(k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
(l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
(m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
(n) Expenditure on account of change in law and force majeure events; and
(o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

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

(4) The capital cost in case of existing or new hydro generating station shall also include:
(a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
(b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.

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

20. The Petitioner vide Auditor's Certificate dated 14.10.2019 has claimed the following capital cost incurred as on COD and projected additional capitalization in respect of the transmission assets:

(₹ in lakh)

Assets	**Apportioned Approved Cost as per FR**	**Capital Cost claimed as on COD**	**Projected Additional Capitalisation**			**Total Capital Cost as on 31.3 2024**
			2019-20	**2020-21**	**2021-22**	
Asset – I(a)	529.91	173.30	158.15	98.49	63.26	489.60
Asset-I(b)	-	376.45*	0.00	0.00	0.00	376.45

* *Gross Block as on the date of re-capitalisation*

Cost Over-run

21. The estimated completion cost of Asset-I(a) based on the Auditor's certificate works out to ₹489.60 lakh including IEDC and IDC which is within the FR apportioned approved cost of ₹529.91 lakh.

22. The Petitioner in Form-5 has given reasons and justifications for cost variation respect of Asset-I(a) from FR cost of ₹529.91 lakh to completion cost ₹489.60 lakh as on 31.3.2024 in and the same is as follows:

a) Due to change in actual site requirements and

b) Minor variations on account of price received through open competitive bidding.

23. With regard to variation in cost of individual items, the Petitioner has submitted that packages under subject scope of works comprise of a large number of items and the same are awarded through open competitive bidding. In the said bidding process, bids are received from multiple parties quoting different rates for various Bill of Quantity (BOQ) items under the said package. The lowest bidder can be evaluated on overall basis only. Hence, item-wise unit prices in contracts and its variation over unit rate considered in FR estimates are beyond the control of the Petitioner.

24. We have considered the submissions of the Petitioner. It is observed that against the total apportioned approved cost as per FR of ₹529.91 lakh, the estimated completion cost including additional capitalisation is ₹489.60 lakh which is within the apportioned approved cost. Therefore, cost variation is allowed.

Time Over-run

25. As per IA dated 21.3.2017, the transmission assets were scheduled to be put into commercial operation within 24 months from the date of IA. Hence, the scheduled date of commercial operation ("SCOD") of the transmission assets was 20.3.2019 against which they were put into commercial operation on 29.6.2019. Therefore, there is a time over-run of 101 days in COD of the transmission assets. The details of SCOD, COD and time over-run are as follows:

Assets	SCOD	COD	Time over-run
Asset-I (a)	20.3.2019	29.6.2019	101 days
Asset-I (b)	---	29.6.2019	----

26. The Petitioner has submitted that time over-run is mainly on account of installation of fire-fighting system (Emulsifier)/ Nitrogen Injection Fire Protection System (NIFPS) as per the directions of CEA which was not considered during preparation of FR. CEA inspection for charging clearance of the transmission assets was carried out on 15.2.2019 before its scheduled commissioning. Subsequently, CEA vide letter dated 18.2.2019 stated that fire-fighting system/ NIFPS is required for oil filled transformer having oil quantity of more than 2000 litre for charging clearance of ICT. In FR cost of the transmission project, fire-fighting system (Emulsifier)/ NIFPS was not considered and the same was installed for Asset-I(b) i.e. ICT-III on the direction of CEA. Upon installation of fire-fighting system (Emulsifier)/ NIFPS, CEA issued NOC for energisation of the transmission assets on 19.6.2019, and ICT-III was finally energized on 27.6.2019.

27. Vide Technical Validation letter dated 29.4.2021, the Petitioner was asked to submit chronology of events leading to time over-run along with detailed justifications. In response, the Petitioner has submitted the chronology of events as follows:

Events	Original Schedule (As per Planning)		Actual Achieved (As per Actual)		Time over-run	Reason
	Start Date	Completion Date	Start Date	Completion Date	Days	
NOA	17-5-2017	17-5-2017	24-3-2017	24-03-2017	Nil	-
Civil Works	17-7-2017	28-11-2018	23-7-2017	23-11-2018	Nil	-
Supplies	21-9-2017	17-12-2018	27-4-2018	24-11-2018	Nil	-
Erection	2-11-2017	13-2-2019	11-5-2018	10-12-2018	Nil	-
Testing and Ready for charging	14-2-2019	20-3-2019	20-1-2019	5-2-2019	Nil	-
Installation of NIFPS System & Commissioning of ICT	Not scheduled as done as per direction of CEA		18-2-2019	28-6-2019	101 days	The delay is mainly on account of installation of fire-fighting system (Emulsifier)/NIFPS as per the direction of CEA which was not considered in FR.

28. LoA for Installation of NIFPS System was awarded at later stage on the direction of CEA and the details are as follows:

Event	LoA date	Completion date as per LoA	Actual completion date	Remarks
Installation of NIFPS System & Commissioning of ICT-III	8.3.2019	7.9.2019	28.6.2019	Installation of NIFPS system competed within schedule

29. Thus, the delay in achieving COD of the transmission assets is mainly on account of installation of fire-fighting system (Emulsifier)/ NIFPS which was on the direction of CEA and was not considered by the Petitioner while preparing FR.

30. As per the Investment Approval (IA) dated 21.3.2017, the project was scheduled to be put into commercial operation within 24 months from the date of IA i.e. by 20.3.2019. The Petitioner in the instant petition has submitted that time over-run is mainly on account of installation of fire-fighting system (Emulsifier)/ NIFPS on the direction of CEA. The Petitioner made online application on 24.12.2018 for inspection of the transmission assets i.e. 1X100 MVA ICT at 220/132 kV Sitarganj Sub-station. CEA vide letter dated 18.2.2019 observed that the Petitioner did not comply with certain provisions of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010. The relevant extract of observations made by CEA vide letter dated 18.2.2019 is as follows:

> *"4. Regulation 44(2)(ix): The oil quantity in transformer exceeds 2000 liters, therefore as per regulation the fire-fighting system for oil filled transformers with oil capacity of more than 2000 litres shall be provided with fire-fighting system as per IS-3034:1993 or with Nitrogen Injection fire Protection system. It was noted that there was no provision for fire-fighting system as per the Regulation for ICT No.3 as well as for existing Nos-1&2 also. It is a clear violation of the Regulation, PGCIL is hereby advised to provide the fire-fighting system as per the Regulation and submit a reply in this regard."*

31. The Petitioner, being a transmission service provider, is well aware of Central Electricity Authority (Measures relating to Safety and Electric supply) Regulations, 2010 as amended from time to time. The Petitioner has placed on record letter of CEA dated 18.2.2019 whereby the Petitioner was directed to comply with certain provisions of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010. CEA vide its letter dated 19.6.2019 granted approval for energisation of the transmission assets. On examination of the entire material on record, the delay on account of installation of fire fighting system cannot be treated as uncontrollable factor for the simple reason that this requirement is contemplated in Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010. Since

non-compliance with this technical requirement is a lapse on the part of Petitioner, time over-run of 101 days on this count is solely attributable to the Petitioner and cannot be condoned. Accordingly, the time over-run of 101 days in achieving commercial operation of the transmission assets is not condoned.

Interest During Construction ("IDC") and Incidental Expenditure During Construction ("IEDC")

32. The Petitioner has claimed IDC in respect of Asset-I(a) and has submitted Auditor's Certificates dated 14.10.2019 in support of the same. The Petitioner has submitted computation of IDC along with year-wise details of the IDC discharged.

33. The Petitioner has submitted the floating rate of interest for calculation of IDC. The loan details submitted in Form-9C for 2014-19 tariff period and IDC computation sheet have been considered for the purpose of IDC calculation on cash basis. The un-discharged IDC as on COD has been considered as Additional Capital Expenditure (ACE) during the year in which it has been discharged. Further, adjustment on account of time over-run has been done to arrive at admissible IDC.

34. Accordingly, based on the information furnished by the Petitioner, IDC considered in respect of Asset-I (a) is as follows:

(₹ in lakh)

Asset	IDC as per Auditor's Certificate	IDC Admissible	IDC disallowed due to time over-run	IDC discharged as on COD	IDC un-discharged as on COD	IDC discharged during	
						2019-20	2020-21
	A	B	C=A-B	D	E=B-D	F	G
Asset-I(a)	5.18	2.42	2.76	1.89	0.52	0.52	-

35. The Petitioner has claimed IEDC of ₹11.77 lakh and has submitted Auditor's Certificate in support of the same. The Petitioner has also submitted that entire IEDC

has been discharged as on COD in respect of the Asset-I(a). IEDC claimed is within the percentage of the hard cost. Accordingly, IEDC is allowed after adjustment of time over-run is as follows:

(₹ in lakh)

Asset	IEDC Claimed (A)	Deducted on account of time over-run (B)	IEDC allowed (C) = (A-B)
Asset-I(a)	11.77	1.43	10.34

Initial Spares

36. The Petitioner has claimed the following Initial Spares in respect of Asset-I(a) under Regulation 23 of the 2019 Tariff Regulations.

Assets	Particulars	Plant & Machinery Cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares Claimed (₹ in lakh)	Ceiling (in %)
Asset-I(a)	Sub-station (AIS – Brown Field)	472.65	30.39	6.00

37. We have considered the submissions of the Petitioner. It is observed that the Initial Spares claimed are in excess of the permissible limits as per the 2019 Tariff Regulations. Therefore, we are restricting the Initial Spares to 6% of Plant and Machinery cost and the same is as follows:

Asset	Particulars	Plant & Machinery Cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares Claimed (₹ in lakh)	Ceiling (in %)	Permissible Initial Spares (₹ in lakh)	Initial Spares dis-charged as on COD (₹ in lakh)	Discharged during 2019-20 (₹ in lakh)	Excess initial spares disallowed (₹ in lakh)
Asset-I(a)	Sub-station (AIS – Brown Field)	472.65	30.39	6.00	28.23	22.80	5.43	2.16

38. As stated earlier, Gross Block of replaced 100 MVA, 220/132 kV ICT-III at Raibareilly sub-station was de-capitalized on 18.2.2018 from Unchahar-III Transmission System and is being re-capitalized from 29.6.2019 in the current

petition. The Petitioner has submitted that the augmentation at Raebareli sub-station was done due to system requirement taking due concurrence of the beneficiaries and not suo-moto and, thus, carrying cost of ₹10.96 lakh as mentioned below from 19.2.2018 to 28.6.2019 is being claimed in the present petition:

(₹ in lakh)

Gross block of decapitalized asset	Gross loan decapitalized (A)	Gross Equity decapitalized	Repayment up to 18.2.2018 (B)	Net loan as on 19.2.2018 (C=A-B)	Interest rate (in %) (D)*	Carrying cost (Interest on loan) (E=C*D)
376.45	263.53	112.92	176.63	86.90	9.3382 (2017-18) 9.3349 (2018-19) 9.3297 (2019-20)	0.89 (2017-18) 8.11 (2018-19) 1.95 (2019-20) **Total-10.96**

**Interest rate of Unchahar-III Transmission System is being considered as per Form-9C of Unchahar-III Transmission System.*

39. We have considered the submissions of the Petitioner. The Petitioner has prayed to allow the carrying cost from the date of de-capitalization to 28.6.2019 in order to service the loan availed. We observe that Asset-I(b) i.e. ICT-III was de-capitalized on 18.2.2018 and, thereafter, the same remained un-utilized till the date of its re-capitalization i.e. 29.6.2019. As Asset-I(b) was not in use for the said period, its tariff cannot be charged from the Respondents. Therefore, no carrying cost is allowed in respect of Asset-I(b).

<u>Additional Capital Expenditure (“ACE”)</u>

40. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as follows:

*“**24. Additional Capitalization within the original scope and up to the cut-off date:***

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

(a) Un-discharged liabilities recognized to be payable at a future date;

(b) Works deferred for execution;

(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;

(d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;

(e) Change in law or compliance of any existing law; and

(f) Force Majeure events:

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

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

***"25. Additional Capitalisation within the original scope and after the cut-off date**:*

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

a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;

b) Change in law or compliance of any existing law;

c) Deferred works relating to ash pond or ash handling system in the original scope of work;

d) Liability for works executed prior to the cut-off date;

e) Force Majeure events;

f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and g) Raising of ash dyke as a part of ash disposal system.

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

(a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations.

(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;

(c) The replacement of such asset or equipment is necessary on account of

(d) The replacement of such asset or equipment has otherwise been allowed by the Commission."

41. The Petitioner has claimed projected ACE for 2019-24 tariff period on account of balance and retention payments due to un-discharged liability projected for works executed within the cut-off date and unexecuted works within cuff-off date. The details of the projected ACE as per Auditor's Certificate is as follows:

(₹ in lakh)

Additional Capital Expenditure claimed	2019-20	2020-21	2021-22
Addition in gross block	158.15	43.79	0.00
Discharge of earlier admitted liability	0.77	51.10	63.26
Total	**158.92**	**94.89**	**63.26**

42. We have considered the submissions of Petitioner. ACE claimed on account of balance and retention payments is allowed under Regulations 24(1)(a) of the 2019 Tariff Regulations. ACE claimed is allowed in respect of Asset-I(a) is as follows:

(₹ in lakh)

Additional Capital Expenditure Allowed	2019-20	2020-21	2021-22
Addition in gross block	158.92	43.79	0.00
Discharge of earlier admitted liability	0.52	51.10	63.26
Less: Excess Initial Spares	2.15	0.00	0.00
Total	**156.51**	**94.89**	**63.26**

<u>Capital Cost as on COD and 31.3.2024</u>

43. Accordingly, capital cost considered in respect of the transmission assets for the purpose of tariff calculation is as follows:

(₹ in lakh)

Asset	Capital Cost claimed in Auditor's Certificate as on COD (A)	IDC disallowed due to time over-run and computational difference (B)	Undischarged IDC as on COD (C)	IEDC disallowed (D)	Excess Initial spares disallowed as on CoD (E)	Expenditure up to COD (F) = (A-B-C-D-E)
Asset- I(a)	173.30	2.76	0.52	1.43	0.00	168.58

Asset	Original COD	Date of re-capitalisation in the instant petition	Date of de-capitalisation in petition No. 119/TT/2020	Original book value of the asset being re-capitalised	Corresponding cumulative depreciation as on date of de-capitalisation*	Corresponding cumulative repayment as on date of de-capitalisation*
Asset-I(b)	1.11.2007	29.6.2019	18.2.2018	₹376.45 lakh	₹196.62 lakh	₹176.63 lakh

**As considered by the Petitioner in order dated 17.10.2021 in Petition No. 119/TT/2020*

44. Therefore, the total estimated completion cost of the transmission assets as on 31.3.2024 is as follows:

Asset	Capital cost allowed as on COD	Additional Capital Expenditure			Total estimated completion cost up to 31.3.2024
		2019-20	2020-21	2021-22	
Asset-I(a)	168.58	156.51	94.89	63.26	483.24
Asset –I(b)	376.45*	0.00	0.00	0.00	376.45

**Gross Block Value as on the date of re-capitalisation.*

Debt-Equity Ratio

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

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

Provided that:

i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:

ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

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

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

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

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

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

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

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

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

46. The details of debt-equity considered for the purpose of computation of tariff for 2019-24 period for transmission assets is as follows:

Asset-I(a)	**Capital Cost as on 1.4.2019 (₹ in lakh)**	**(in %)**	**Total Capital Cost as on 31.3.2024 (₹ in lakh)**	**(in %)**
Debt	118.01	70.00	338.27	70.00
Equity	50.57	30.00	144.97	30.00
Total	**168.58**	**100.00**	**483.24**	**100.00**

Asset-I(b)	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	263.53	70.00	263.53	70.00
Equity	112.92	30.00	112.92	30.00
Total	**376.45**	**100.00**	**376.45**	**100.00**

Depreciation

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

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

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

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

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

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

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

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

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

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

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the 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 upto 31.3.2019 from the gross depreciable value of the assets.

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

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

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

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

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

48. WAROD has been worked out and is placed as Annexure-II after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. For Asset-I(a), the depreciation has been worked out considering the admitted capital expenditure as on COD i.e. 29.6.2019. The accumulated depreciation in respect of Asset-I(b) as on COD, i.e. 29.6.2019, has been considered the same as it was on the date of de-capitalization from Unchahar-III Transmission System i.e. 18.2.2018. We have considered the elapsed life of Asset-I(b) as 10 years on the date of de-capitalization. The depreciation allowed in respect of the transmission assets is as follows:

(₹ in lakh)

Asset –I(a)	**2019-20 (Pro-rata 277 days)**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Opening Gross Block	168.58	325.09	419.98	483.24	483.24
Addition during the year 2019-24 due to projected ACE	156.51	94.89	63.26	0.00	0.00
Closing Gross Block	325.09	419.98	483.24	483.24	483.24
Average Gross Block	246.84	372.53	451.61	483.24	483.24
Weighted Average Rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
Lapsed useful life at the beginning of the year	0.00	1.00	2.00	3.00	4.00
Balance useful life at the beginning of the year (Year)	25.00	24.00	23.00	22.00	21.00
Aggregated Depreciable Value	222.15	335.28	406.45	434.92	434.92
Depreciation during the year	**9.86**	**19.67**	**23.84**	**25.52**	**25.52**
Aggregate Cumulative Depreciation at the end of the year	9.86	29.53	53.38	78.89	104.41
Remaining Aggregate Depreciable Value at the end of the year	212.29	305.75	353.07	356.02	330.51

(₹ in lakh)

Asset-I(b)	**2019-20 (Pro-rata 277 days)**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Opening Gross Block	376.45	376.45	376.45	376.45	376.45
Addition during the year 2019-	0.00	0.00	0.00	0.00	0.00

24 due to projected ACE					
Closing Gross Block	376.45	376.45	376.45	376.45	376.45
Average Gross Block	376.45	376.45	376.45	376.45	376.45
Weighted Average Rate of Depreciation (WAROD) (in %)	5.28	5.28	2.19	2.19	2.19
Lapsed useful life at the beginning of the year	10.00	11.00	12.00	13.00	14.00
Balance useful life at the beginning of the year (Year)	15.00	14.00	13.00	12.00	11.00
Aggregated Depreciable Value	338.81	338.81	338.81	338.81	338.81
Depreciation during the year	**15.04**	**19.88**	**8.25**	**8.25**	**8.25**
Aggregate Cumulative Depreciation at the end of the year	211.66	231.54	239.79	248.04	256.29
Remaining Aggregate Depreciable Value at the end of the year	127.14	107.27	99.01	90.76	82.51

Interest on Loan ("IoL")

49. 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 upto the date of de-capitalisation of such asset.

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

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

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

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

(5a) The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.

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

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

50. The weighted average rate of interest on IoL has been considered on the basis of the rates prevailing as on 1.4.2019. The Petitioner has prayed that change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up. In view of above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL computed in respect of transmission assets is as follows:

(₹ in lakh)

Asset-I(a)	**2019-20 (Pro-rata 277 days)**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Gross Normative Loan	118.01	227.57	293.99	338.27	338.27
Cumulative Repayments up to Previous Year	0.00	9.86	29.53	53.38	78.89
Net Loan-Opening	118.01	217.70	264.45	284.89	259.38
Addition due to ACE	109.56	66.42	44.28	0.00	0.00
Repayment during the year	9.86	19.67	23.84	25.52	25.52
Net Loan-Closing	217.70	264.45	284.89	259.38	233.86
Average Loan	167.85	241.08	274.67	272.13	246.62
Weighted Average Rate of Interest on Loan (in %)	8.276	8.276	8.276	8.275	8.275
Interest on Loan	13.89	19.95	22.73	22.52	20.41
Pro-rata Interest on Loan	**10.51**	**19.95**	**22.73**	**22.52**	**20.41**

(₹ in lakh)

Asset -I(b)	2019-20 (Pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	263.53	263.53	263.53	263.53	263.53
Cumulative Repayments up to Previous Year	176.63	191.67	211.55	219.80	228.05
Net Loan-Opening	86.90	71.86	51.98	43.73	35.48
Addition due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	15.04	19.88	8.25	8.25	8.25
Net Loan-Closing	71.86	51.98	43.73	35.48	27.23
Average Loan	79.38	61.92	47.85	39.60	31.35
Weighted Average Rate of Interest on Loan (in %)	9.330	9.321	9.301	9.275	9.268
Interest on Loan	7.41	5.77	4.45	3.67	2.91
Pro-rata Interest on Loan	**5.60**	**5.77**	**4.45**	**3.67**	**2.91**

Return on Equity ("RoE")

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

> *"**30. Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.*
>
> *(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:*
>
> *Provided that return on equity in respect of additional capitalization after cutoff date beyond the original scope, excluding additional capitalization on 7 account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%;*
>
> *Provided further that:*
>
> *i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;*

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

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

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

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

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

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

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

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

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

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

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

(₹ in lakh)

Asset-I(a)	**2019-20 (Pro-rata 277 days)**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Opening Equity	50.57	97.53	125.99	144.97	144.97
Addition due to ACE	46.95	28.47	18.98	0.00	0.00
Closing Equity	97.53	125.99	144.97	144.97	144.97
Average Equity	74.05	111.76	135.48	144.97	144.97
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	13.91	20.99	25.45	27.23	27.23
Pro-rata Return on Equity	**10.53**	**20.99**	**25.45**	**27.23**	**27.23**

(₹ in lakh)

Asset-I(b)	2019-20 (Pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
Opening Equity	112.92	112.92	112.92	112.92	112.92
Addition due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	112.92	112.92	112.92	112.92	112.92
Average Equity	112.92	112.92	112.92	112.92	112.92
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	21.21	21.21	21.21	21.21	21.21
Pro-rata Return on Equity	**16.05**	**21.21**	**21.21**	**21.21**	**21.21**

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

53. Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations provide as follows:

*"**35 (3) Transmission system**: (a) The following normative operation and maintenance expenses shall be admissible for the combined 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*

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Double Circuit (Bundled conductor with four or more sub-conductors)	*1.322*	*1.368*	*1.416*	*1.466*	*1.517*
Double Circuit (Twin & Triple Conductor)	*0.881*	*0.912*	*0.944*	*0.977*	*1.011*
Double Circuit (Single Conductor)	*0.377*	*0.391*	*0.404*	*0.419*	*0.433*
Multi Circuit (Bundled Conductor with four or more sub-conductor)	*2.319*	*2.401*	*2.485*	*2.572*	*2.662*
Multi Circuit (Twin & Triple Conductor)	*1.544*	*1.598*	*1.654*	*1.713*	*1.773*
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	*834*	*864*	*894*	*925*	*958*
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	*1,666*	*1,725*	*1,785*	*1,848*	*1,913*
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	*2,252*	*2,331*	*2,413*	*2,498*	*2,586*
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	*2,468*	*2,555*	*2,645*	*2,738*	*2,834*
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	*1,696*	*1,756*	*1,817*	*1,881*	*1,947*
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	*2,563*	*2,653*	*2,746*	*2,842*	*2,942*

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

Provided further that:

i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-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."

54. The O&M Expenses claimed by the Petitioner and allowed in respect of the transmission assets are as follows:

(₹ in lakh)

Asset-I(a)	**2019-20 (Pro-rata 277 days)**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Sub-station Bays					
220 kV	1	1	1	1	1
132 kV & Below	1	1	1	1	1
Norm (₹ lakh/bay)					
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV & Below	16.08	16.64	17.23	17.83	18.46
Total Sub-station O&M Expenses	**38.59**	**39.94**	**41.35**	**42.79**	**44.30**
Total O&M Expenses	**38.59**	**39.94**	**41.35**	**42.79**	**44.30**

(₹ in lakh)					
Pro-rated O&M Expenses (₹ in lakh)	**29.21**	**39.94**	**41.35**	**42.79**	**44.30**

(₹ in lakh)

Asset-I(b)	2019-20 (Pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
Transformers					
220 kV	100	100	100	100	100
Norm (₹ lakh/MVA)					
220 kV	0.25	0.25	0.26	0.27	0.28
Total Sub-station O&M Expenses	**24.50**	**25.40**	**26.30**	**27.20**	**28.20**
Total O&M Expenses (₹ in lakh)	**24.50**	**25.40**	**26.30**	**27.20**	**28.20**
Pro-rated O&M Expenses (₹ in lakh)	**18.54**	**25.40**	**26.30**	**27.20**	**28.20**

Interest on Working Capital (“IWC”)

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

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

…..

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

(i) Receivables equivalent to 45 days of annual fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and

(iii) Operation and maintenance expenses, including security expenses for one month.”

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 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. Definition *- In these regulations, unless the context otherwise requires:-*

*(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;"*

56. The Petitioner has submitted that it has computed IWC for 2019-24 tariff period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of 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, 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21 and 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% + 350 basis points) for 2021-24. The components of the working capital and interest allowed thereon in respect of the transmission assets are as follows:

(₹ in lakh)

Asset-I(a)	**2019-20 (Pro-rata 277 days)**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Working Capital for O&M Expenses (O&M Expenses for one month)	3.22	3.33	3.45	3.57	3.69
Working Capital for Maintenance Spares (15% of O&M Expenses)	5.79	5.99	6.20	6.42	6.65
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	10.05	12.70	14.29	14.88	14.76
Total Working Capital	**19.05**	**22.02**	**23.94**	**24.86**	**25.10**
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest of working capital	2.30	2.48	2.51	2.61	2.64
Pro-rata Interest of working capital	**1.74**	**2.48**	**2.51**	**2.61**	**2.64**

(₹ in lakh)

Asset-I(b)	2019-20 (Pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	2.04	2.12	2.19	2.27	2.35
Working Capital for Maintenance Spares (15% of O&M Expenses)	3.68	3.81	3.95	4.08	4.23
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	9.20	9.12	7.60	7.62	7.63
Total Working Capital	**14.91**	**15.04**	**13.74**	**13.97**	**14.21**
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest of working capital	1.80	1.69	1.44	1.47	1.49
Pro-rata Interest of working capital	**1.36**	**1.69**	**1.44**	**1.47**	**1.49**

Annual Fixed Charges for 2019-24 Tariff Period

57. The transmission charges allowed in respect of the transmission assets for 2019-24 tariff period are as follows:

(₹ in lakh)

Asset-I(a)	2019-20 (Pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	9.86	19.67	23.84	25.52	25.52
Interest on Loan	10.51	19.95	22.73	22.52	20.41
Return on Equity	10.53	20.99	25.45	27.23	27.23
Interest on Working Capital	29.21	39.94	41.35	42.79	44.30
Operation and Maintenance	1.74	2.48	2.51	2.61	2.64
Total	**61.85**	**103.03**	**115.89**	**120.66**	**120.09**

(₹ in lakh)

Asset-I(b)	2019-20 (Pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	15.04	19.88	8.25	8.25	8.25
Interest on Loan	5.60	5.77	4.45	3.67	2.91
Return on Equity	16.05	21.21	21.21	21.21	21.21
Interest on Working Capital	18.54	25.40	26.30	27.20	28.20
Operation and Maintenance	1.36	1.69	1.44	1.47	1.49
Total	**56.60**	**73.95**	**61.65**	**61.80**	**62.06**

Filing Fee and Publication Expenses

58. 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.

59. We have considered the submissions of Petitioner. Regulation 70(1) of the 2019 Tariff Regulations provides for reimbursement of filing fees and publication expenses paid by the Petitioner. Accordingly, 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 and RLDC Fees and Charges

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

Goods and Services Tax

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

62. Since GST is not levied on transmission service at present, we are of the view that Petitioner's prayer is pre-mature.

Security Expenses

63. The Petitioner has submitted that security expenses in respect of transmission assets is not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC.

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

Capital Spares

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

Sharing of transmission charges

66. 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. However, with effect from 1.11.2020, the 2010 Sharing Regulations has been repealed and sharing is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the liabilities of 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 shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of 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.

67. To summarise,

(a) AFC allowed in respect of the transmission assets for 2019-24 tariff period in the instant order are as follows:

Asset-I (a) **(₹ in lakh)**

2019-20 (Pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
61.85	103.03	115.89	120.66	120.09

Asset-I(b) **(₹ in lakh)**

2019-20 (Pro-rata 277 days)	2020-21	2021-22	2022-23	2023-24
56.60	73.95	61.65	61.80	62.06

68. Annexure-I given hereinafter shall form part of the order.

69. This order disposes of Petition No. 273/TT/2020 in terms of the above discussions and findings.

sd/-	sd/-	sd/-
(P.K. Singh) **Member**	**(I.S. Jha)** **Member**	**(P. K. Pujari)** **Chairperson**

Annexure - I

2019-24	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
Capital Expenditure as on 1.4.2019		**2019-20**	**2020-21**	**2021-22**			**2019-20 (₹ in lakh)**	**2020-21 (₹ in lakh)**	**2021-22 (₹ in lakh)**	**2022-23 (₹ in lakh)**	**2023-24 (₹ in lakh)**
Free Hold Land	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Building	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Transmission Line	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Sub-station	168.58	156.51	94.89	63.26	**483.25**	5.28%	13.31	19.67	23.85	25.52	25.52
PLCC	0.00	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00	0.00	0.00
IT Equipment and software	0.00	0.00	0.00	0.00	0.00	15.00%	0.00	0.00	0.00	0.00	0.00
TOTAL	**168.58**	**156.51**	**94.89**	**63.26**	**483.25**		**13.31**	**19.67**	**23.85**	**25.52**	**25.52**
					Average Gross Block (₹ in lakh)		246.84	372.55	451.62	483.25	483.25
					Weighted Average Rate of Depreciation (%)		5.28%	5.28%	5.28%	5.28%	5.28%