CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI**

Petition No. 711/TT/2020

Coram:

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

Date of Order: 16.12.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of 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: New EMS/SCADA at SLDCs of UPPTCL, RRVPNL, DTL, HVPNL, BBMB, PSPTCL, HPSEBL and J&K PDD, Asset-II: New EMS/SCADA at SLDCs of UPPTCL and J&K PDD under "Expansion and Replacement of existing SCADA/EMS System at SLDC's of Northern Region (NR ULDC Phase-II)".

And in the matter of:

Power Grid Corporation of India Limited, "Saudamini", Plot No. 2, Sector 29, Gurgaon – 122 001.

....Petitioner

Vs.

- 1. Rajasthan Rajya Vidyut Prasaran Nigam Limited (RRVPNL), Vidyut Bhawan, Vidyut Marg, Jaipur – 302 005 (Rajsthan).
- 2. Ajmer Vidyut Vitran Nigam Limited (AVVNL), 132 kV GSS RVPNL Sub- Station Building, Caligiri Road, Malviya Nagar, Jaipur – 302 017 (Rajasthan).
- 3. Jaipur Vidyut Vitran Nigam Limited (JVVNL), 132 kV GSS RVPNL Sub - Station Building. Caligiri Road, Malviya Nagar, Jaipur – 302 017 (Rajasthan).
- 4. Jodhpur Vidyut Vitran Nigam Limited (JVVNL), 132 kV GSS RVPNL Sub - Station Building,



- Caligiri Road, Malviya Nagar, Jaipur 302 017 (Rajasthan).
- 5. Himachal Pradesh State Electricity Board (HPSEB), Vidyut Bhawan, Kumar House Complex Building II, Shimla 171 004 (Himachal Pradesh).
- 6. Punjab State Electricity Board (PSEB), The Mall, Patiala – 147 001 (Punjab).
- 7. Haryana Power Purchase Centre (HPPC), Shakti Bhawan, Sector-6, Panchkula – 134 109 (Haryana).
- 8. Power Development Department (PDD), Government of Jammu & Kashmir, Mini Secretariat, Jammu.
- Uttar Pradesh Power Corporation Limited (UPPCL), (Formarly Uttar Pradesh State Electricity Board), Shakti Bhawan, 14, Ashok Marg, Lucknow – 226 001 (Uttar Pradesh).
- Delhi Transco Limited (DTL), Shakti Sadan, Kotla Road, New Delhi – 110 002 (Delhi).
- 11. BSES Yamuna Power Limited, BSES Bhawan, Nehru Place, New Delhi (Delhi).
- 12. BSES Rajdhani Power Limited, BSES Bhawan, Nehru Place, New Delhi (Delhi).
- Tata Power Delhi Distribution Limited,
 33 kV Sub-station, Building,
 Hudson Lane, Kingsway Camp,
 North Delhi 110 009 (Delhi).
- 14. Chandigarh Administration, Sector 9, Chandigarh.
- Uttarakhand Power Corporation Limited (UPCL),
 Urja Bhawan, Kanwali Road, Dehradun (Uttarakhand).
- North Central Railway, Allahabad (Uttar Pradesh).



 New Delhi Municipal Council (NDMC), Palika Kendra, Sansad Marg, New Delhi – 110 002 (Delhi).

Uttar Pradesh Power Transmission Corporation Limited (UPPTCL),
 11th Floor, Shakti Bhawan, 14 Ashok Marg,
 Lucknow – 226 001 (Uttar Pradesh).
Respondent(s)

For Petitioner : Shri S.S. Raju, PGCIL

Shri D.K. Biswal, PGCIL

Shri Ved Prakash Rastogi, PGCIL

Shri A.K. Verma, PGCIL

For Respondents: None

<u>ORDER</u>

Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition for truing up of transmission tariff of the period from COD 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 determination of transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the following assets (hereinafter referred to as the "transmission assets") under "Expansion and Replacement of existing SCADA/EMS System at SLDC's of Northern Region (NR ULDC Phase-II)" in Northern Region (hereinafter referred to as the "transmission project").

- i. Asset-I: New EMS/SCADA at SLDCs of UPPTCL, RRVPNL, DTL, HVPNL, BBMB, PSPTCL, HPSEBL and J&K PDD;
- ii. Asset-II: New EMS/SCADA at SLDCs of UPPTCL and J&K PDD.
- 2. The Petitioner has made the following prayers in the instant petition:

- "1) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 7.1 & 8.4 above.
- 2) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019. as per para 8 and 9 above for respective block.
- 3) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
- 4) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
- 5) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.
- 6) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 8.10 above.
- 7) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 8) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.
- 9) Condone the delay in completion of Asset-I and Asset-II on merit of the same being out of the control of the Petitioner in line with CERC Regulations' 2014 12(2)(i) "uncontrollable factors".

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) and expenditure sanction for the transmission system was accorded by the Board of Directors of the Petitioner in its 275th meeting held on 6.8.2012 at an estimated cost of



₹7090 lakh including IDC of ₹548 lakh based on 2nd quarter, 2011 price level (communicated vide Memorandum No. C/CP/NR-ULDC (II) dated 7.8.2012).

- The scope of the transmission project was discussed and agreed in the b. 7th TCC and 8th NRPC meetings held on 24.4.2008 and 25.4.2008. respectively. The scheme was further discussed and approved in the 24th meeting dated 24.8.2009 of the ULDC Scheme Monitoring Group (USMG) under NRPC.
- The scope of work covered under the transmission project is as follows: C.

Installation of:

- New EMS/ SCADA platform equipped with hardware and software at SLDCs of UPPTCL, RRVPNL, DTL, HVPNL, BBMB, PSPTCL, HPSEBL and J&K PDD.
- New EMS/ SCADA platform equipped with hardware and software at backup SLDCs of UPPTCL, RRVPNL, DTL, HVPNL, BBMB, PSPTCL, HPSEBL and J&K PDD. BBMB SLDC and PSPTCL SLDC shall be backup of each other and similarly HPSEBL SLDC and HVPNL SLDC shall be backup of each other.
- iii) Auxiliary power supply (APS) system for control centers.
- iv) Remote Terminal Units (RTU"s) for UPPTCL, PSTCL, HPSEBL, BBMB and HVPNL which shall also work as data concentrator.
- v) New Video projection System for main SLDC"s of UPPTCL, PSTCL, BBMB, DTL, HVPNL, HPSEBL, J&K PDD and for backup SLDC"s of RRVPNL and J&K PDD. UPPTCL has executed a 3x2 67" BARCO make video projection system (VPS) at existing SLDC system in July, 2010. The scope includes the shifting, transportation, insurance and integration with the new system to be executed at backup controlcCentre of UPPTCL. Similarly RRVPNL is under the process of procurement of new VPS for main SLDC. The scope includes the integration of this new VPS with SCADA/EMS system of main SLDC at RRVPNL.

vi) Video Conferencing Units at SLDCs.

Integration of:

- RTUs/ SAS to Main and Backup Control Centre. i)
- Main and Backup Control Centers of SLDCs with Main and Backup NRLDC.
- iii) Distribution Company (DISCOM) Control Centres with their respective Main & Backup SLDCs.
- The Petitioner vide affidavit dated 14.9.2021 has submitted that the entire d. scope of the transmission project as per IA is complete and is covered in the instant petition.
- The transmission assets were scheduled to be put into commercial e. operation within 27 months from the date of IA i.e. 6.8.2012. Hence, the scheduled date of commercial operation of the transmission assets is 6.11.2014. There is time over-run in the execution of the transmission assets. The details of scheduled date of commercial operation (SCOD), date of commercial operation (COD) and time over-run with respect to the transmission assets are as follows:

Asset Nomen- clature in previous order	Asset Nomen- clature in current Petition	SCOD	COD	Time over- run	Time over-run condoned
Order date	d 15.12.2017	<u>' in Petition N</u>	o.: 144/TT/201	6	
Combined Asset	Asset-I	6.11.2014	31.12.2015	13 months and 25 days (420 days)	(i)Time over-run of 11 months and 22 days condoned i.e. from SCOD to 28.10.2015. (ii)Time over-run not condoned from 29.10.2015 to the COD. To be considered at the true-up stage.

Asset Nomen- clature in previous order	Asset Nomen- clature in current Petition	SCOD	COD	Time over- run	Time over-run condoned
Order date	11.4.2019	In Petition No	.: 243/TT/2018		UPPTCL Portion
Combined Asset (UPPTCL Portion and J&K Portion)	Asset-II	.6.11.2014	30.11.2016	24 months and 25 days (755 days)	(i)Time over-run of 21 months and 26 days condoned i.e. from SCOD to 30.8.2016. (ii)Time over-run not condoned from 31.8.2016 to the COD. To be considered at the true-up stage. J&K Portion (i)Time over-run of 23 months and 13 days condoned i.e. from SCOD to 17.10.2016. (ii)Time over-run not condoned from 18.10.2016 to the COD. To be considered at the true-up stage.

f. The Commission vide order dated 15.12.2017 in Petition No. 144/TT/2016 condoned the time over-run up to 28.10.2015 and held that the time over-run beyond 29.10.2015 shall be considered at the time of true-up in case of Asset-1 (nomenclature as per the instant petition). The relevant protion of the order dated 15.12.2017 is as follows:

> "20.The petitioner has submitted the documents in support of time overrun upto 28.10.2015. Accordingly, the time over-run of 11 months and 22 days from the scheduled COD of 6.11.2014 to 28.10.2015 is condoned. The petitioner has not submitted proper justification for the time over-run from 29.10.2015 to the date of commercial operation, i.e. 31.12.2015, and, therefore the said period of time over-run for the corresponding period is not condoned. The petitioner is granted liberty to file documents to show when the additional work sought by the SLDCs was completed to verify time over-run from 29.10.2015 to 31.12.2015 at the time of truing-up."



The Commission vide order dated 11.4.2019 in Petition No. 243/TT/2018 g. has partially condoned the time over-run and the remaining portion of the time over-run shall be considered at the time of true-up in case of Asset-2 (nomenclature as per the instant petition). The relevant extract of the order dated 11.4.2019 is as follows:

"UPPTCL Portion

24...... The Petitioner has submitted the documents in support of time overrun up to 30.8.2016 and has not submitted proper justification in respect of time over-run of 93 days i.e. from 31.8.2016 to the COD. We have considered the submissions made by the Petitioner. The delay of 21 months and 26 days is due to failure on the part of UPPTCL. Accordingly, the time over-run of 21 months 26 days from the scheduled COD of 5.11.2014 to 30.8.2016 is condoned. As the Petitioner has not submitted proper justification in respect of time overrun of 93 days, the same is not condoned. The petitioner is granted liberty to file documents to show when the additional work sought by the SLDCs was completed to verify time over-run of these 93 days at the time of truing-up."

"J&K Portion

- 25...... The petitioner has submitted the documents in support of time overrun upto 17.10.2016 and has not submitted proper justification in respect of time overrun of 45 days i.e. from 18.10.2016 to the COD. Accordingly, the time over-run of 23 months and 13 days from the scheduled COD of 5.11.2014 to 17.10.2016 is condoned. As the Petitioner has not submitted proper justification in respect of time overrun of 45 days i.e. from 18.10.2016 to the COD, the said period of 45 days is not condoned. The petitioner is granted liberty to file documents to show when the additional work sought by the SLDCs was completed to verify time over-run of these 45 days at the time of truing-up."
- 4. The Respondents are distribution licensees, power departments, power utilities and transmission licensees, who 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 application has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 (hereinafter referred to as "the Act"). No comments or suggestions have been received from the general public in response

to the aforesaid notices published in the newspapers by the Petitioner. Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No. 9, has filed its reply vide affidavit dated 28.7.2021 and has raised the issue of filing of separate petitions for true up of 2014-19 and determination of tariff for 2019-24 tariff periods for ease of prudent check, splitting of the transmission assets covered in the transmission project, variation in capital cost vis-à-vis FR cost, details of bids received, sharing of revenue earned, if any, prior to COD, time over-run and corresponding disallowance of IDC & IEDC etc. In response, the Petitioner has filed its rejoinder vide affidavit dated 22.9.2021. The issue raised by UPPCL and the clarifications given by the Petitioner are considered in the relevant portions of this order.

- Hearing in this matter was held on 1.8.2022 through video conference and the 6. order was reserved.
- 7. This order is issued considering the submissions made by the Petitioner in the petition, affidavit dated 5.8.2021, reply to TV vide affidavit dated 14.9.2021, RoP reply vide affidavit dated 8.10.2021 and UPPCL's reply filed vide affidavit dated 28.7.2021 and Petitioner's rejoinder *vide* affidavit dated 22.9.2021 thereto.
- 8. Having heard the representatives of the Petitioner and having perused the material on record, we proceed to dispose of the petition.
- 9. UPPCL has submitted that the Petitioner has filed a combined petition for trueup of 2014-19 tariff period and tariff determination for 2019-24 period. Combining true-up and tariff petition in one petition results into compacted presentation, sometimes difficult to address to various issues due to paucity of information, as has

happened in the instant petition. In the instant petition, DPR, IA, decisions of RPC/TTC, Standing Committee or CCEA and bidding details etc. have not been submitted by the Petitioner. Therefore, the Petitioner may be directed to file separate petitions for true-up and tariff determination along with documents not filed with the instant Petition. UPPCL has further submitted that once a project is conceived and sanctioned for a defined scope of work, single cost estimate and COD, it cannot be split into sub-assets and same might not be allowed andthe true-up and tariff proposal may be considered for overall scope of work.

- 10. UPPCL has submitted that the Petitioner has not disclosed details of bids invited by it for construction of the project. UPPCL has further submitted that there is time over-run of about 24 months 25 days as such, time over-run and cost overrun may be re-evaluated in this true up petition considering SCOD of the transmission project on 6.11.2014 (as per IA), quoted-bid-price, the final completion cost calculated based on bills paid to the successful bidder and actual execution of the transmission project on 30.11.2016 (when Asset-II was put into commercial operation). Accordingly, tariff may be determined based on price quoted by the successful bidder subject to prudence check of the capital cost by the Commission for time over-run and cost over-run. Additionally, the Petitioner has earned revenue prior to the execution of the transmission project on 30.11.2016 as such the revenue so received may be adjusted in the true-up Petition.
- In response, the issues raised by UPPCL as above have been clarified by the Petitioner in its rejoinder filed vide affidavit dated 22.9.2021. The Petitioner has submitted that that requisite information, in accordance with the Tariff Regulations

for carrying out prudence check of the claims made including copy of IA, RPC approvals, DPR etc. was furnished in Petition Nos. 144/TT/2016 and 243/TT2018 on the basis of which tariff was granted by the Commission. The Petitioner has submitted that it implements ULDC schemes based on recommendations of RPC. The instant ULDC scheme executed by the Petitioner consists of various assets like EMS/ SCADA platform equipped with hardware and software at SLDC's and backup SLDC's, Remote Terminal Units (RTU's) along with data concentrator, New Video projection System for main SLDC's and backup SLDC's. The scope also include the shifting, transportation, insurance and integration with the new system to be commissioned at backup control centre of UPPTCL etc. The Petitioner has put into commercial operation all the transmission assets covered in the transmission project and declared COD as 31.12.2015 except for some part of the work associated with UPPTCL portion and J&K PDD portion which could not be completed due change in scope of SLDC at UPPTCL end, law and order and unexpected heavy rain and snow fall in Srinagar/ Kashmir etc. which was beyond the control of the Petitioner. Subsequently, the remaining portions associated with UPPTCL was completed and put to commercial use on on 30.11.2016. Therefore, the time over-run of the assets was beyond the control of the Petitioner. The Petitioner has submitted the RLDC certificates along with the COD of respective assets in its original petition and filed the petition as per the 2014 Tariff Regulations. The reasons for time over-run has been placed before the Commission in original Petition Nos. 144/TT/2016 and 243/TT2018. Same has been considered by the Commission in its respective tariff orders dated 15.12.2017 and 11.4.2019. Further, deliberation of time over-run has been done at relevant portion of this order.

- 12. The Petitioner has further submitted that Regulation 6 of the 2014 Tariff Regulations provides the flexibility to transmission licensees that for the purpose of tariff, the capital cost of a project may be broken up into transmission lines or Substations forming part of the project, if required. Assets have been grouped as per their COD for the purpose of tariff and asset wise apportionment of cost has been done as per the grouping of assets in actual. The transmission charges allowed in respective tariff orders will be recovered from respective states under the proviso to Regulation 43(2) of the 2014 Tariff Regulations.
- We have considered the submissions made by UPPCL and the clarifications submitted by the Petitioner with regard to preliminary issues like splitting of assets under a project, filing separate tariff petitions for separate tariff periods etc. Earlier, the Commission has allowed tariff for two assets of the transmission project in separate orders dated 15.12.2017 and 11.4.2019 in Petition Nos. 144/TT/2016 and 243/TT/2018 respectively. Accordingly, the Petitioner has submitted the instant petition for true-up of above orders dated 15.12.2017 and 11.4.2019 for 2014-19 period as per the relevant provisions of the 2014 Tariff Regulations. Further, as per extant practice/ Regulations, the Petitioner has also included the tariff proposal of 2019-24 period in the instant petition as per the relevant provisions of the 2019 Tariff Regulations. Thus, the clarifications submitted by the Petitioner with regard to splitting of assets as per COD and subsequent apportionment of approved cost as per FR etc. has been included in this order in the relevant paragraphs. Further, the Petitioner has submitted all the informatin and documents regarding the approvals pertaining to their approvals and their COD, on the basis of which COD of the assets and cost of the project was admitted by the Commission in orders dated 15.12.2017

and 11.4.2019 in Petition No. 144/TT/2016 and Petition No. 243/TT/2018 respectively.

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

14. The details of the trued-up transmission charges claimed by the Petitioner in respect of the transmission assets are as follows:

(₹ in lakh)

Asset- I									
Particulars	2015-16 (Pro-rata 92 days)	2016-17	2017-18	2018-19					
Depreciation	166.54	723.47	737.84	747.05					
Interest on Loan	67.78	252.55	188.19	126.69					
Return on Equity	65.63	285.14	290.80	295.20					
Interest on Working Capital	6.91	29.03	28.01	26.91					
O&M Expenses	0.00	0.00	0.00	0.00					
Total	306.86	1290.19	1244.84	1195.85					

(₹ in lakh)

Asset-II								
Particulars	2016-17 (Pro-rata 122 days)	2017-18	2018-19					
Depreciation	36.17	132.75	141.94					
Interest on Loan	12.93	40.87	33.22					
Return on Equity	14.26	52.32	56.09					
Interest on Working Capital	1.38	4.93	5.04					
O&M Expenses	0.00	0.00	0.00					
Total	64.74	230.87	236.29					

The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission assets are as follows:

Asset- I									
Particulars	2015-16 (Pro-rata 92 days)	2016-17	2017-18	2018-19					
O&M Expenses	0.00	0.00	0.00	0.00					
Maintenance Spares	0.00	0.00	0.00	0.00					
Receivables	203.46	215.03	207.47	199.31					
Total of Working Capital	203.46	215.03	207.47	199.31					
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50					

Interest of working	6.91	29.03	28.01	26.91
Capital	0.31	29.03	20.01	20.91

(₹ in lakh)

Asset-II								
Particulars	2016-17 (Pro-rata 122 days)	2017-18	2018-19					
O&M Expenses	0.00	0.00	0.00					
Maintenance Spares	0.00	0.00	0.00					
Receivables	32.28	38.48	39.38					
Total of Working Capital	32.28	38.48	39.38					
Rate of Interest on working capital (in %)	12.80	12.80	12.80					
Interest of working Capital	1.38	4.93	5.04					

Capital Cost

- 16. The capital cost of the transmission assets has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations.
- 17. The Commission *vide* order dated 15.12.2017 in Petition No. 144/TT/2016 in respect of Asset-I and *vide* order dated 11.4.2019 in Petition No. 243/TT/2018 in respect of Asset-II allowed the capital cost as on COD and admitted the Additional Capital Expenditure (ACE) for determination of tariff for 2014-19 period in respect of the transmission assets. The details of the same are as follows:

(₹ in lakh)

Assets	FR apportioned approved	Admitted cost up to COD	ACE allowed					Total cost as on 31.3.2019
	cost	10 COD	2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-I	5901.99	4029.41	0.00	616.11	148.72	0.00	0.00	4794.24
Asset-II	1188.18	604.99	0.00	0.00	232.73	117.09	0.00	954.81
Total	7090.17	4634.4	0.00	616.11	381.45	117.09	0.00	5749.05

18. The Petitioner *vide* Auditor's Certificates dated 8.6.2021 has submitted the capital cost upto the date of COD along with ACE up to 31.3.2019. The details of the apportioned approved capital cost, capital cost as on COD and ACE incurred up to 31.3.2019 as claimed by the Petitioner in the instant true up petition in respect of the transmission assets are as follows:

(₹ in lakh)

Assets	FR apportioned approved	Cost up		ACE claimed			Total cost as on 31.3.2019	
	capital cost		2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-I	5901.99	4146.55	0.00	710.95	0.00	122.83	0.00	4980.33
Asset-II	1188.18	614.99	0.00	0.00	232.58	84.73	27.91	960.21
Total	7090.17	4761.54	0.00	710.95	381.45	207.56	27.91	5940.54

Cost Over-run

- UPPCL has submitted that the Petitioner invites bids for the complete scope of work on overall basis and completion cost of the transmission project is discovered through competitive bidding. Therefore, the cost discovered through competitive bidding cost must be considered for determination of tariff. After discovery of the cost through bids, original IA has no relevance and the same should not be considered for determination of tariff. IA has already been set so high (19.35%) to establish that there is no cost over-run in completion of the project. UPPCL has submitted that the capital cost as on 31.3.2019 of the project was ₹5940 lakh which has been reduced by about ₹1149 lakh in comparison to the original approved cost of ₹7090 lakh. It is observed that the completion cost of the transmission project has reduced in comparison to the IA. Therefore, the Petitioner must explain the reason of the estimate being very high (19.35%) in view of the observations made by the Commission in order dated 27.5.2016 in Petition No. 62/TT/2015. UPPCL has further submitted that the price paid by the Petitioner over and above the quoted bid price may be considered as cost over-run due to delayed execution of the transmission project.
- 20. In response, the Petitioner has submitted that there is no cost over-run in case of both the assets covered in the instant petition. The Petitioner has submitted that being a Government Enterprise, they have been following a well laid down

procurement policy which ensures both transparency and competitiveness in the bidding process. The Petitioner follows a robust and time-tested system of preparing cost estimates before obtaining IA. Cost estimates are prepared based on schedule of rates and the schedule of rates is prepared based on the average of unit rates of latest three bids/LOAs/ raw material prices in order to achieve the cost efficiency by estimating the capital cost of the transmission project. After IA, the award letters are placed on the executing agencies on the basis of tendering process as per best industry practices and due diligence is undertaken including justification of bid prices vis-à-vis estimated cost before placing the awards. Subsequently, the award for execution of the project is placed after following the transparent process of tendering, bid evaluation and award of work to lowest technical and commercially responsive bid. Further, the cost control measures are taken during execution of the project and only under unavoidable situations caused by the actual soil/ terrain conditions, crossing requirements (river, power line, railway line, forest stretches and any other compelling technical reason), and the cost may undergo changes. The Petitioner has submitted Form-5A indicating details such as package wise number of bids recieved, date of award, contractor details, award prices etc. The award prices represent the lowest responsive prices available at the time of bidding of various pakages.

21. Further, regarding variation in cost of individual item, it is submitted that the 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 BOQ items under the said package. The lowest bidder can be arrived at/ 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 petition. The Petitioner has submitted Form-5 indicating item wise cost variation and requested that the capital cost as claimed may be allowed.

22. We have considered the submissions of the Petitioner and UPPTCL. It is observed from the submissions of the Petitioner that the major reasons for cost variation of the transmission project is towards net decrease of ₹138.53 lakh towards equipment supply and erection due to LOA prices being lower than the estimate as per actual bidding, net decrease of ₹151.60 lakh towards inland freight and insurance as per actuals, net decrease of about ₹98.07 lakh towards taxes and duties (including entry tax in J&K) as per actuals and net decrease of ₹110.98 lakh and ₹422.87 lakh towards IDC and IEDC as per actual booking vis-à-vis normative rates considered at the time of estimate and reduction in the project cost. The Commission has already taken cognisance of cost variation and the completion cost of Asset-I and Asset-II is within the FR cost. The total capital cost of the transmission project of ₹5940.54 lakh as on 31.3.2019, is within the FR apportioned cost of ₹7090.17 lakh. Further, asset-wise capital cost is within the respective FR apportioned cost. Accordingly, the capital cost claimed by the Petitioner is allowed.

Time Over-run

- 23. As per IA dated 6.8.2012, SCOD of the transmission project was 27 months from the date of IA.
- 24. The Commission *vide* order dated 15.12.2017 in Petition No. 144/TT/2016 condoned the time over-run up to 28.10.2015 and held that the time over-run beyond

29.10.2015 shall be considered at the time of true-up in case of Asset-I. Further, in case of Asset-II, the Commission vide order dated 11.4.2019 in Petition No. 243/TT/2018 condoned the time over-run up to 30.8.2016 (UPPTCL portion) and 17.10.2016 (J&K portion) and held that the time over-run beyond 31.8.2016 (UPPTCL portion) and 18.10.2016 (J&K portion) shall be considered at the time of true-up.

- 25. UPPCL has submitted that time over-run of about 24 months 25 days and resultant time over-run may be re-evaluated in this true-up petition considering the SCOD of the transmission project as 6.11.2014, quoted-bid-price, the final completion cost calculated based on bills paid to the successful bidder and actual execution of the transmission project as 30.11.2016 (along with COD of Asset-II). Accordingly, IDC and IEDC for the delayed period may not be allowed.
- In response, the Petitioner has submitted that SCOD of the transmission project was 6.11.2014. The time over-run of Asset-I has already been condoned up to 28.10.2015 and liberty was granted to the Petitioner to file documents to show when the additional work sought by SLDC's was completed to verify the time overrun from 29.10.2015 to 31.12.2015. Accordingly, the Petitioner has submitted the delay justification in the instant petition in which it has submitted that there is no delay in execution of Asset-I from 29.10.2015 to 31.12.2015 as all works pertaining to Asset-I was completed before April, 2015. Activity wise completion schedule is mentioned in NRLDC certificate. The minor variation was recorded by NRLDC (SOE issue, alarm management, change in reports, porting of old data to New SCADA). In

fact, the Petitioner was waiting for the execution of remaining Asset-II and finally declared the COD on 31.12.2015.

Regarding Asset-II, the Petitioner has submitted regarding UPPTCL portion of Asset-II, that the time over-run has already been condoned up to 30.8.2016 (UPPTCL portion) and liberty was granted to the Petitioner to file documents to show when the additional work sought by SLDC's was completed to verify the time overrun from 31.8.2016 to 30.11.2016 (COD). The Petitioner has submitted that UPPTCL's control room at Lucknow was made ready on 30.8.2016. Thereafter, complete running system needed to be dismantled from SLDC at Shakti Bhawan including packing, transportation and then installation was carried out at new control room. Before shifting of all hardware items, complete system needed to be migrated to backup control center for which joint activity was carried out by the Petitioner through Siemens and UPPTCL. Further, the Lucknow control room under the scope of UPPTCL was getting delayed and the Petitioner was continuously communicating with UPPTCL and the Petitioner learnt from UPPTCL that Lucknow control room at Gomti Nagar shall be ready by June, 2016. Accordingly, the Petitioner placed amendment of LOA on 31.3.2016 with a competition schedule of 3 months for shifting works and increase of VPS size. Accordingly, minimum 3 months time was required for dismantling, packing and transportation and then full system installation (mounting of racks, servers' installation), software configuration, testing and final execution. The Lucknow control room was finally available on 30.8.2016, hence, the Petitioner took 3 months additional time to to put into commercial operation the UPPTCL portion of Asset-II.

- 28. Regarding J&K portion of Asset-II, the Petitioner has submitted that the time over-run has already been condoned up to 17.10.2016 and liberty was allowed to the Petitioner to file documents to show when the additional work sought by SLDC's was completed to verify the time over-run from 18.10.2016 to 30.11.2016 (COD). The Petitioner has submitted that due to law and order problems in J&K no vendor was able to go to work upto 27.10.2016 and the chronology was submitted by the Petitioner in Petition No. 243/TT/2016. Thereafter, the Petitioner took an additional time of approximately 45 days to complete the remaining works and put into commercial operation the J&K portion along with UPPTCL portion of Asset-II. Hence, the additional time over-run in case of Asset-I and Asset-II may be condoned.
- 29. We have considered the submission of the Petitioner and UPPCL. As per IA dated 6.8.2012, the transmission project was scheduled to be put into commercial operation within 27 months from the date of IA. Accordingly, SCOD of the transmission assets was 6.11.2014 against which Asset-I and Asset-II have been put under commercial operation w.e.f. 31.12.2015 and 30.11.2016 respectively. Hence, there is a time over-run of 420 days and 755 days in execution of Asset-I and Asset-II respectively.
- 30. The Petitioner has submitted that the time over-run is mainly due to delay in handing over of the work site on account of revision of scope and non-readiness of sites, control centers and supporting infrastructure and non-installation of UPS and DG set etc., law and order situations and natural calamities. The Petitioner has submitted copies of relevant documents in support of time over-run justification. The Commission partially condoned the time over-run vide order dated 15.12.2017 in Petition No. 144/TT/2014 and vide order dated 11.4.2019 in Petition No.

243/TT/2018 in case of Asset-I and Asset-II respectively and granted liberty to file documents to show when the additional work sought by the SLDCs was completed to verify time over-run from 29.10.2015 to 31.12.2015 (COD) at the time of truing-up in case of Asset-I and the same from 31.8.2016 (UPPTCL) and 18.10.2016 (J&K) to 30.11.2016 (COD) in case of Asset-II.

31. It has been observed that the scope of work involves Expansion and Replacement of Existing SCADA/ EMS System of Northern Region (Phase-II) involving SLDCs and backup SLDCs of STUs of NR namely, UPPTCL, RRVPNL, DTL, HVPNL, BBMB, PSPTCL, HPSEBL and J&K PDD including integration of Main and Backup Control Centers of DISCOMs with their respective Main & Backup SLDCs. Therefore, there is involvement of multiple SLDCs owned by various STUs of Northern Region. The installation of the new system by way of replacing the existing system depends on the availability of SLDC control rooms and backup SLDC control rooms. The scope involves activities inside the control room building as well as outdoor installation such as RTUs. Therefore, the delay in handing over of SLDC control rooms owned by various entities (STUs/DISCOMs) had a cascading effect on the overall completion of the transmission project due to which there was delay in execution of both Asset-I and Asset-II. Thus, the delay in putting into commercial operation of of Asset-I up to 31.12.2015 is beyond the control of the Petitioner.

32. Further, the Lucknow control room of UPPTCL was made available on 30.8.2016. Thereafter, as per the time schedule of the amended LOA as brought out above, the Petitioner took 3 months time for dismantling, packing and transportation and then full system installation (mounting of racks, installation of servers), software

configuration, testing and final execution of remaining portion of work at UPPTCL's end and put Asset-II under commercial operation on 30.11.2016. Therefore, the time over-run of last element of the transmission project up to 30.11.2016 is beyond the control of the Petitioner. It is also observed that the hindrance due to law and order situation in J&K prevailed upto 17.10.2016. Thereafter, the Petitioner took an additional time of approximately 45 days to complete the remaining works and put into commercial operation the J&K portion along with UPPTCL portion of Asset-II. Thus, the time over-run in J&K work gets subsumed in the delay due to UPPTCL work.

33. In view of above, we find that the overall time over-run in case of Asset-I and Asset-II was due to delay in handing over the work site on account of revision of scope and non-readiness of sites, control centers and supporting infrastructure and non-installation of UPS and DG Set etc., law and order situations and natural calamities etc. was beyond the control of the Petitioner. Accordingly, the time over-run for Asset-I upto 31.12.2015 and time over-run for Asset-II (UPPTCL & J&K portion) upto 30.11.2016 is condoned.

Interest During Construction (IDC)

- 34. The Petitioner has claimed IDC for the transmission assets and has submitted the Auditor's Certificates in support of the same. The Petitioner has submitted the computation of IDC along with year-wise details of the IDC discharged.
- 35. UPPCL has submitted that due to time over-run there was cost over-run in execution of the transmission project. Hence, IDC and IEDC for the period of time over-run may not be allowed.

- 36. In response, the Petitioner has submitted that it has submitted the Auditor's Certificates for both the assets along with the bifurcation of IDC and IEDC and elementwise break-up in Form-5. The Petitioner has further submitted that it has claimed the cost as per the actual cost incurred up to 31.3.2019 in both the assets and claimed transmission tariff as per the 2014 Tariff Regulations.
- 37. We have considered the submissions of the Petitioner and UPPCL. The allowable IDC has been worked out considering the information submitted by the Petitioner for the transmission assets separately on cash basis. The loan details submitted in Form-9C for the 2014-19 tariff period and the IDC computation sheet have been considered for the purpose of IDC calculation on cash and accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged.
- 38. Accordingly, based on the information furnished by the Petitioner, IDC considered is as follows:

(₹ in lakh)

	IDC		IDC dis-			IDC d	DC discharge during		
Assets	claimed by the Petitioner as per Auditor's Certificate	IDC admissible	allowed due to computa- tional error	IDC Dis- charged as on COD	IDC Undis- charged as on COD	2015-16	2016-17	2017-18	
	Α	В	C=A-B	D	E=B-D	F	G	Н	
Asset-I	345.13	330.87	14.25	241.95	88.92	33.37	55.54	0.00	
Asset-II	18.29	18.29	0.00	8.29	10.00	0.00	0.15	9.85	

Incidental Expenditure during Construction (IEDC)

39. The Petitioner has claimed IEDC in respect of the transmission assets and has submitted Auditor's Certificate in support of the same. The Petitioner has submitted the entire IEDC has been discharged as on COD in respect of the transmission

assets. Accordingly, IEDC is allowed as claimed, subject to adjustment as per condonation of time over-run, if any. The details of IEDC claimed and allowed are as follows:

(₹ in lakh)

Assets	IEDC claimed as per Auditor's Certificate	IEDC disallowed due to time over-run	IEDC allowed as on COD
Asset-I	235.82	0.00	235.82
Asset-II	47.49	0.00	47.49

40. The Petitioner has not claimed any initial spares for the transmission assets.

Capital Cost as on COD

41. Accordingly, capital cost allowed as on COD is as follows:

(₹ in lakh)

	Capital cost	Less: IDC as on	Capital cost	
Assets	claimed as on COD as per Auditor's Certificate (A)	Time over-run not condoned/ Computation difference (B)	Un- discharged (C)	considered as on COD (D=A-B-C)
Asset – I	4146.55	14.25	88.92	4043.37
Asset – II	614.99	0.00	10.00	604.99

Additional Capital Expenditure ("ACE")

42. The Commission *vide* order dated 15.12.2017 in Petition No. 144/TT/2016 in respect of Asset-I and *vide* order dated 11.4.2019 in Petition No. 243/TT/2018 in respect of Asset-II had allowed ACE in respect of the transmission assets and the same is as follows:

(₹ in lakh)

Acceto	ACE				
Assets	2015-16	2016-17	2017-18	2018-19	
Asset-I	616.11	148.72	0.00	0.00	
Asset-II	0.00	232.73	117.09	0.00	

43. The Petitioner has claimed ACE for the transmission assets covered in the instant petition and has submitted the Auditor's Certificates in support of the same.

Further, the Petitioner has confirmed that the ACE in respect of the transmission assets is within cut-off date. The Petitioner has also submitted the liability flow statement for 2014-19 period indicating head-wise and party-wise details. The details of ACE claimed is as follows:

(₹ in lakh)

	ACE 2014-2019					
Assets	(as per Auditor's Certificate)					
	2015-16	2016-17	2017-18	2018-19		
Asset-I	710.95	0.00	122.83	0.00		
Asset-II	0.00	232.58	84.73	27.91		

44. We have considered the submissions of the Petitioner. The actual ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i) and Regulation 14(1)(ii) of the 2014 Tariff Regulations, as it is on account of undischarged liability towards balance and retention payments and works deferred for execution within the cut-off date. The un-discharged IDC liability as on COD has been allowed as ACE during the year of its discharge. ACE allowed for 2014-19 tariff period in respect of the transmission assets is as follows:

(₹ in lakh)

				(*
Asset-I	ACE allowed for year			•
Particulars	2015-16	2016-17	2017-18	2018-19
ACE to the extent of Balance & Retention				
Payments and work deferred for execution	710.95	0.00	122.83	0.00
(as per Auditor's Certificate)				
Add: IDC Discharged	33.37	55.54	0.00	0.00
Total ACE allowed	744.32	55.54	122.83	0.00

(₹ in lakh)

Asset-II ACE allowed for year			•	
Particulars	2015-16	2016-17	2017-18	2018-19
Expenditure as per Auditor's Certificate	0.00	232.58	84.73	27.91
Discharge of IDC Liability	0.00	0.15	9.85	0.00
Total ACE allowed	0.00	232.73	94.58	27.91

Capital Cost for 2014-19 tariff period

45. Accordingly, capital cost in respect of the transmission assets considered for



(₹ in lakh)

	FR Apportioned	Capital cost as	ΔCE allowed				Total Capital
Assets	Apportioned approved capital cost	on COD on cash basis	2015-16	2016-17	2017-18	2018-19	Cost as on 31.3.2019
Asset-I	5901.99	4043.37	744.32	55.54	122.83	0.00	4966.07
Asset-II	1188.18	604.99	0.00	232.73	94.58	27.91	960.21
Total	7090.17	4648.36	744.32	288.27	217.41	27.91	5926.28

Debt-Equity Ratio

46. The Petitioner has claimed debt-equity ratio of 70:30 as on COD and for ACE post COD. Debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during 2014-19 period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of debt-equity ratio in respect of the transmission assets as on COD and as on 31.3.2019 is as follows:

	As on COD		As on 31.3.2019		
Asset-I	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)	
Debt	2830.36	70.00	3476.25	70.00	
Equity	1213.01	30.00	1489.82	30.00	
Total	4043.37	100.00	4966.07	100.00	

	As on COD		As on 31.3.2019		
Asset-II	Amount (₹ in lakh)	(in %) Amount (₹ in lakh)		(in %)	
Debt	423.49	70.00	672.15	70.00	
Equity	181.50	30.00	288.06	30.00	
Total	604.99	100.00	960.21	100.00	

Depreciation

47. The Petitioner vide affidavit dated 5.8.2021 has submitted that communication equipment including SCADA are to be considered as IT equipment as per Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (First Amendment) Regulations, 2015 and as such depreciation has been claimed accordingly. Depreciation for IT equipment is @15% but in the original petition and

in the instant true-up petition it was inadvertently claimed @ 6.33%. The said error has been rectified and revised tariff forms has been submitted. The Petitioner has submitted Auditor's Certificate along with bifurcation of cost of SCADA/EMS, RTU and Auxiliary Power Supply system.

48. We have considered the submissions of the Petitioner. Depreciation for the transmission asset was allowed @ 6.33% in the original petitions as claimed by the Petitioner. Depreciation is allowed in the instant order for the transmission assets considering them as IT equipment @15% as claimed by the Petitioner. Depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on COD and approved ACE during 2014-19 tariff period. The Gross Block during 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD). WAROD at Annexure-I and Annexure-II has been worked out after taking into account the depreciation rates of the transmission assets as prescribed in the 2014 Tariff Regulations and trued-up depreciation allowed in respect of the transmission assets for 2014- 19 tariff period is as follows:

	Asset-I						
SI. No.	Particulars	2015-16 (Pro-rata for 92 days)	2016-17	2017-18	2018-19		
Α	Opening Gross Block	4043.37	4787.70	4843.24	4966.07		
В	ACE	744.32	55.54	122.83	0.00		
С	Closing Gross Block (A+B)	4787.70	4843.24	4966.07	4966.07		
D	Average Gross Block (A+C)/2	4415.53	4815.47	4904.65	4966.07		
Е	Weighted average rate of Depreciation (WAROD) (in %)	15.00	15.00	15.00	15.00		
F	Balance useful life at the beginning of the year	7	7	6	5		
G	Lapsed life at the beginning of the year	0	0	1	2		

Н	Aggregated Depreciable Value	4415.53	4815.47	4904.65	4966.07
I	Combined Depreciation during the year (D*E)	166.49	722.32	735.70	744.91
J	Cumulative Depreciation at the end of the year	166.49	888.81	1624.51	2369.42
K	Remaining Aggregated Depreciable Value	4249.05	3926.66	3280.15	2596.65

(₹ in lakh)

				(III lakii)					
	Asset-II								
SI. No.	Particulars	2016-17 (Pro-rata for	2017-18	2018-19					
		122 days)							
Α	Opening Gross Block	604.99	837.72	932.30					
В	ACE	232.73	94.58	27.91					
С	Closing Gross Block (A+B)	837.72	932.30	960.21					
D	Average Gross Block (A+C)/2	721.36	885.01	946.26					
Е	Weighted average rate of Depreciation (WAROD) (in %)	15.00	15.00	15.00					
F	Balance useful life at the beginning of the year	0.00	0.00	1.00					
G	Lapsed life at the beginning of the year	7.00	7.00	6.00					
Н	Aggregated Depreciable Value	721.36	885.01	946.26					
I	Combined Depreciation during the year (D*E)	36.17	132.75	141.94					
J	Cumulative Depreciation at the end of the year	36.17	168.92	310.86					
K	Remaining Aggregated Depreciable Value	685.19	716.09	635.40					

49. The details of the depreciation allowed in respect of Asset-I vide order dated 15.12.2017 in Petition No. 144/TT/2016 and in respect of Asset-II vide order dated 11.4.2019 in Petition No. 243/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

Assets	Particulars	2015-16	2016-17	2017-18	2018-19
Asset	Approved <i>vide</i> order dated 15.12.2017 in Petition No. 144/TT/2016	69.02	298.77	303.48	303.48
Asset-I	Claimed by the Petitioner in the instant petition	166.54	723.47	737.84	747.05
	Allowed after true-up in this order	166.49	722.32	735.70	744.91
Asset-II	Approved <i>vide</i> order dated 11.4.2019 in Petition No. 243/TT/2018	1	15.26	56.73	60.44

Claimed by the Petitioner in the instant petition	-	36.17	132.75	141.94
Allowed after true-up in this order	-	36.17	132.75	141.94

Interest on Loan ("IoL")

50. The Petitioner has claimed the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. Accordingly, IoL is calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of IoL allowed are as follows:

(₹ in lakh)

	Asset- I						
SI. No.	Particulars	2015-16 (Pro-rata for 92 days)	2016-17	2017-18	2018-19		
Α	Gross Normative Loan	2830.36	3351.39	3390.27	3476.25		
В	Cumulative Repayments upto Previous Year	0.00	166.49	888.81	1624.51		
С	Net Loan-Opening (A-B)	2830.36	3184.90	2501.46	1851.74		
D	Addition due to ACE	521.03	38.88	85.98	0.00		
Е	Repayment during the year	166.49	722.32	735.70	744.91		
F	Net Loan-Closing (C+D-E)	3184.90	2501.46	1851.74	1106.83		
G	Average Loan (C+F)/2	3007.63	2843.18	2176.60	1479.29		
Н	Weighted Average Rate of Interest on Loan (in %)	8.96	8.87	8.62	8.53		
I	Interest on Loan (G*H)	67.77	252.13	187.53	126.22		

	Asset-II						
SI. No.	Particulars	2016-17 (Pro-rata for 122 days)	2017-18	2018-19			
		423.49	586.40	652.61			
Α	Gross Normative Loan	0.00	36.17	168.92			
В	Cumulative Repayments upto Previous Year	423.49	550.24	483.69			
С	Net Loan-Opening (A-B)	162.91	66.21	19.54			
D	Addition due to ACE	36.17	132.75	141.94			
Е	Repayment during the year	423.49	586.40	652.61			
F	Net Loan-Closing (C+D-E)	550.24	483.69	361.29			
G	Average Loan (C+F)/2	486.87	516.96	422.49			
Н	Weighted Average Rate of Interest on Loan (in %)	7.94	7.91	7.86			
I	Interest on Loan (G*H)	12.93	40.87	33.22			

51. The details of the IoL allowed in respect of Asset-I *vide* order dated 15.12.2017 in Petition No. 144/TT/2016 and in respect of Asset-II *vide* order dated 11.4.2019 in Petition No. 243/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

Assets	Particulars	2015-16	2016-17	2017-18	2018-19
Assat I	Approved <i>vide</i> order dated 15.12.2017 in Petition No. 144/TT/2016	67.98	278.00	255.56	228.23
Asset-I	Claimed by the Petitioner in the instant petition	67.78	252.55	188.19	126.69
	Allowed after true-up in this order	67.77	252.13	187.53	126.22
Asset-II	Approved <i>vide</i> order dated 11.4.2019 in Petition No. 243/TT/2018	-	13.22	46.77	45.48
	Claimed by the Petitioner in the instant petition	-	12.93	40.87	33.22
	Allowed after true-up in this order	-	12.93	40.87	33.22

Return on Equity ("RoE")

52. The Petitioner has claimed RoE in respect of the transmission assets in terms of Regulation 24 and Regulation 25 of the 2014 Tariff Regulations. The Petitioner has submitted that the income tax assessment has been completed and assessment order has been issued by the Income Tax Department in case of 2014-15 and 2015-16 and that the income tax return have been filed with Income Tax Department for 2016-17 and 2017-18 and income tax return for 2018-19 will be filed in due course of time and has claimed the following effective tax rates for 2014-19 tariff period:

Year	Claimed effective tax (in %)	Grossed-up RoE [(Base Rate)/(1-t)] (in %)
2014-15	21.018	19.625
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

53. The Petitioner has also prayed for claiming the differential tariff on account of

the trued-up RoE based on effective rate calculated on completion of Income tax assessment/ re-assessment for 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 on receipt of respective assessment orders, directly from the beneficiaries, on year-to-year basis as provided under the 2014 Tariff Regulations.

- 54. It has been noted that the Petitioner while claiming annual effective tax rate for the 2014-19 tariff period has included the interest amount while as per Regulation 25(3) of the 2014 Tariff Regulations, penalty if any arising on account of delay in deposit or short deposit of tax amount should not be claimed by the generating company or the transmission licensee as the case may be. Section 234 of IT Act, 1961 broadly covers the interest levied for defaults and delay in submission of IT returns, delay in payment of advance tax, deferment of advance tax etc.
- 55. Further, it has already been discussed at length vide order dated 27.4.2020 in Petition No. 274/TT/2019 that MAT rate is applicable on the Petitioner. We are of the view that grossing up rate of RoE beyond MAT rate cannot be allowed as higher tax has been paid because of interest rate and not higher tax rate. Accordingly, the Commission is not inclined to accede to the Petitioner's prayer to claim differential tariff on account of RoE based on effective rate calculated on completion of Income tax assessment/re-assessment for 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 on receipt of respective assessment, directly from the beneficiaries, on year-to-year basis.
- 56. The Commission *vide* order dated 27.4.2020 in Petition No. 274/TT/2019 has already arrived at the effective tax rate for the Petitioner based on the notified MAT rates which as follows:

A.

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

The MAT rates approved in order dated 27.4.2020 in Petition No. 57. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of 2014-19 tariff 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

58. Accordingly, the RoE allowed in respect of the transmission assets is as follows:

	Asset- I				
SI. No.	Particulars	2015-16 (Pro-rata for 92 days)	2016-17	2017-18	2018-19
Α	Opening Equity	1213.01	1436.31	1452.97	1489.82
В	Addition due to ACE	223.30	16.66	36.85	0.00
С	Closing Equity (A+B)	1436.31	1452.97	1489.82	1489.82
D	Average Equity (A+C)/2	1324.66	1444.64	1471.40	1489.82
Е	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pretax)	19.705	19.705	19.705	19.758
Н	Return on Equity (Pre-tax) (D*G)	65.61	284.67	289.94	294.36

	Asset-II							
SI. No.	Particulars	2016-17 (Pro-rata for 122 days)	2017-18	2018-19				
Α	Opening Equity	181.50	251.32	279.69				
В	Addition due to ACE	69.82	28.37	8.37				
С	Closing Equity (A+B)	251.32	279.69	288.06				
D	Average Equity (A+C)/2	216.41	265.50	283.88				
Е	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500				
F	Tax Rate applicable (in %)	21.342	21.342	21.549				
G	Rate of Return on Equity (Pre-tax)	19.705	19.705	19.758				
Н	Return on Equity (Pre-tax) (D*G)	14.25	52.32	56.09				

59. The details of the RoE allowed in respect of Asset-I *vide* order dated 15.12.2017 in Petition No. 144/TT/2016 and in respect of Asset-II *vide* order dated 11.4.2019 in Petition No. 243/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

Assets	Particulars	2015-16	2016-17	2017-18	2018-19
Appet	Approved <i>vide</i> order dated 15.12.2017 in Petition No. 144/TT/2016	64.14	277.67	282.05	282.05
Asset-I	Claimed by the Petitioner in the instant petition	65.63	285.14	290.80	295.20
	Allowed after true-up in this order	65.61	284.67	289.94	294.36
Asset-II	Approved <i>vide</i> order dated 11.4.2019 in Petition No. 243/TT/2018	-	14.18	52.73	56.17
	Claimed by the Petitioner in the instant petition	-	14.26	52.32	56.09
	Allowed after true-up in this order	-	14.25	52.32	56.09

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

60. The Petitioner has not claimed any O&M Expenses in respect of the transmission assets for 2014-19 tariff period.

Interest on Working Capital ("IWC")

61. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations.



62. IWC allowed in respect of the transmission assets are as follows:

(₹ in lakh)

	Asset- I				
SI. No.	Particulars	2015-16 (Pro-rata for 92 days)	2016-17	2017-18	2018-19
А	Working Capital for O&M Expenses (one month of O&M expenses)	0.00	0.00	0.00	0.00
В	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	0.00	0.00	0.00	0.00
С	Working Capital for Receivables (Receivables equivalent to two months of fixed cost)	203.40	214.68	206.85	198.72
D	Total of Working Capital (A+B+C)	203.40	214.68	206.85	198.72
Е	Rate of Interest (in %)	13.50	13.50	13.50	13.50
F	Interest of working Capital (DxE)	6.90	28.98	27.92	26.83

(₹ in lakh)

	Asset-II					
SI. No.	Particulars	2016-17 (Pro-rata for 122 days)	2017-18	2018-19		
Α	Working Capital for O&M Expenses (one month of O&M expenses)	0.00	0.00	0.00		
В	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	0.00	0.00	0.00		
С	Working Capital for Receivables (Receivables equivalent to two months of fixed cost)	32.28	38.48	39.38		
D	Total of Working Capital (A+B+C)	32.28	38.48	39.38		
Е	Rate of Interest (in %)	12.80	12.80	12.80		
F	Interest of working Capital (DxE)	1.38	4.93	5.04		

63. The details of IWC allowed in respect of Asset-I vide order dated 15.12.2017 in Petition No. 144/TT/2016 and in respect of Asset-II vide order dated 11.4.2019 in Petition No. 243/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

Assets	Particulars	2015-16	2016-17	2017-18	2018-19
Asset-I	Approved <i>vide</i> order dated 15.12.2017 in Petition No. 144/TT/2016	4.63	19.67	19.36	18.73
ASSEL-I	Claimed by the Petitioner in the instant petition	6.91	29.03	28.01	26.91
	Allowed after true-up in this order	6.90	28.98	27.92	26.83
Asset-II	Approved <i>vide</i> order dated 11.4.2019 in Petition No. 243/TT/2018	-	1.38	4.93	5.04
	Claimed by the Petitioner in the instant petition	-	0.93	3.41	3.53
	Allowed after true-up in this order	-	1.38	4.93	5.04

Approved Annual Fixed Charges for 2014-19 Tariff Period

64. Accordingly, Annual Fixed Charges (AFC) in respect of the transmission assets after truing-up for 2014-19 tariff period are as follows:

(₹ in lakh)

Asset- I							
Particulars	2015-16 (Pro-rata for 92 days)	2016-17	2017-18	2018-19			
Depreciation	166.49	722.32	735.70	744.91			
Interest on Loan	67.77	252.13	187.53	126.22			
Return on Equity	65.61	284.67	289.94	294.36			
O&M Expenses	0.00	0.00	0.00	0.00			
Interest on Working Capital	6.90	28.98	27.92	26.83			
Total	306.77	1288.10	1241.09	1192.32			

(₹ in lakh)

Asset-II								
Particulars	2016-17 (Pro-rata for 122 days)	2017-18	2018-19					
Depreciation	36.17	132.75	141.94					
Interest on Loan	12.93	40.87	33.22					
Return on Equity	14.25	52.32	56.09					
O&M Expenses	0.00	0.00	0.00					
Interest on Working Capital	1.38	4.93	5.04					
Total	64.73	230.87	236.29					

65. The details of the AFC allowed in respect of Asset-I vide order dated 15.12.2017 in Petition No. 144/TT/2016 and in respect of Asset-II vide order dated 11.4.2019 in Petition No. 243/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

Assets	Particulars	2015-16	2016-17	2017-18	2018-19
Asset-I	Approved vide order dated 15.12.2017 in Petition No. 144/TT/2016	205.77	874.11	860.44	832.48
	Claimed by the Petitioner in the instant petition	306.86	1290.19	1244.84	1195.85
	Allowed after true-up in this order	306.77	1288.10	1241.09	1192.32
Asset-II	Approved vide order dated 11.4.2019 in Petition No. 243/TT/2018	0.00	43.60	159.64	165.62
	Claimed by the Petitioner in the instant petition	0.00	64.74	230.87	236.29
	Allowed after true-up in this order	0.00	64.73	230.87	236.29

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

66. Regulation 8(1) (i) of the 2019 Tariff Regulations provides as follows:

"8. Tariff determination

(1) Tariff in respect of a generating station may be determined for the whole of the generating station or unit thereof, and tariff in respect of a transmission system may be determined for the whole of the transmission system or element thereof or associated communication system:

Provided that:

- (i) In case of commercial operation of all the units of a generating station or all elements of a transmission system prior to 1.4.2019, the generating company or the transmission licensee, as the case may be, shall file consolidated petition in respect of the entire generating station or transmission system for the purpose of determination of tariff for the period 1.4.2019 to 31.3.2024:"
- 67. The transmission assets have been put into commercial operation prior to 1.4.2019 and consists of entire scope of the subject transmission project. Therefore, as per Regulation 8(1)(i) of the 2019 Tariff Regulations, the Petitioner is required to file consolidated petition in respect of the entire transmission system for the purpose of determination of tariff for the period 1.4.2019 to 31.3.2024. However, it is observed that the Petitioner has submitted the tariff forms without combining all the assets into a single asset. In this connection, the Commission *vide* TV letter dated 6.9.2021

directed the Petitioner to clarify with reasons for not combining the transmission assets in 2019-24 period. In response, the Petitioner vide affidavit dated 14.9.2021 has submitted that the transmission charges with respect to the transmission assets is being shared by the respective states of Northern Region, therefore, transmission tariff has been calculated separately for the transmission assets in the 2019-24 tariff period.

68. The Petitioner has claimed the following transmission charges in respect of the transmission assets for 2019-24 tariff period and the same are as follows:

(₹ in lakh)

Asset-I									
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24				
Depreciation	747.05	747.05	747.05	364.28	0.00				
Interest on Loan	63.08	15.52	0.00	0.00	0.00				
Return on Equity	280.62	280.62	280.62	280.62	280.62				
Interest on Working Capital	16.40	15.73	15.50	9.73	4.22				
O&M Expenses	0.00	0.00	0.00	0.00	0.00				
Total	1107.15	1058.92	1043.17	654.63	284.84				

(₹ in lakh)

Asset-II								
Particulars	2019-20	2020-21	201-22	2022-23	2023-24			
Depreciation	144.03	144.03	144.03	144.03	73.23			
Interest on Loan	22.85	11.46	2.91	0.00	0.00			
Return on Equity	54.10	54.10	54.10	54.10	54.10			
Interest on Working Capital	3.32	3.16	3.03	2.99	1.91			
O&M Expenses	0.00	0.00	0.00	0.00	0.00			
Total	224.30	212.75	204.07	201.12	129.24			

69. The details of IWC claimed by the Petitioner in respect of the transmission assets for 2019-24 period are as follows:

(₹ in lakh)

Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	136.13	130.55	128.61	80.71	35.02
Total	136.13	130.55	128.61	80.71	35.02
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	16.40	15.73	15.50	9.73	4.22

(₹ in lakh)

Asset-II									
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24				
O&M expenses	0.00	0.00	0.00	0.00	0.00				
Maintenance Spares	0.00	0.00	0.00	0.00	0.00				
Receivables	27.58	26.23	25.16	24.80	15.89				
Total	27.58	26.23	25.16	24.80	15.89				
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05				
Interest on Working Capital	3.32	3.16	3.03	2.99	1.91				

Capital Cost

- 70. 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;
- (I) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
- (n) Expenditure on account of change in law and force majeure events; and
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (3) The Capital cost of an existing project shall include the following:
 - (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
 - (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
 - (c) Capital expenditure on account of 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."
- 71. The trued-up capital cost as on 31.3.2019 for transmission assets has been considered as capital cost as on 31.3.2019. The capital cost has been dealt in line with Regulation 19 of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, sub-station and PLCC) as admitted by the Commission as on 31.3.2019 in respect of Asset-I and Asset-II has been considered as opening capital cost as on 1.4.2019 and the same is as follows:

(₹ in lakh)

Elements	Asset-I	Asset-II
Building	-	-
Sub-station Equipment	-	-
PLCC	-	-
IT Equipment and Software	4966.07	960.21
Total Capital cost as on 1.4.2019	4966.07	960.21

- 72. The trued-up capital cost of ₹4966.07 lakh and ₹960.21 lakh in respect of the Asset-I and Asset-II respectively as on 31.3.2019 is considered as opening capital cost as on 1.4.2019 for the purpose of determination of tariff for 2019-24 tariff period.
- 73. The Petitioner has not claimed any ACE during the 2019-24 tariff period.

Capital Cost for 2019-24 tariff period

74. Accordingly, the capital cost in respect of the transmission assets considered for 2019-24 tariff period are as follows:

(₹ in lakh)

	FR Apportioned	Capital Cost as	ACE	Capital Cost as	
Assets	approved capital cost	on 1.4.2019	2019-24	on 31.3.2024	
Asset-I	5901.99	4966.07	0.00	4966.07	
Asset-II	1188.18	960.21	0.00	960.21	
Total	7090.17	5926.28	0.00	5926.28	

75. Against the overall FR apportioned approved capital cost of ₹7090.70 lakh, the estimated project cost of the transmission assets as on 31.3.2024 is ₹5926.28 lakh which is within the FR apportioned approved cost.

Debt-Equity Ratio

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

Particulars	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Asset-I				
Debt	3476.25	70.00	3476.25	70.00
Equity	1489.82	30.00	1489.82	30.00
Total	4966.07	100.00	4966.07	100.00
Asset- II				
Debt	672.15	70.00	672.15	70.00
Equity	288.06	30.00	288.06	30.00
Total	960.21	100.00	960.21	100.00



Depreciation

- 78. Regulation 33 of the 2019 Tariff Regulations provide 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 theasset:

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 oflower 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 decapitalized described 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."
- 79. The Petitioner has submitted Auditor's Certificate along with bifurcation of cost of SCADA/EMS, RTU and Auxiliary Power Supply system. Further, as the billing of the transmission assets has to be done state wise, they are not combined.
- 80. We have considered the submissions of the Petitioner. IT equipment has been considered as part of the Gross Block and depreciated using WAROD. WAROD at Annexure-III and Annexure-IV has been worked out after taking into account the

depreciation rates of IT assets, as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e., IT assets has been considered as 100% depreciable. Depreciation has been worked out considering the ACE as on 31.3.2019 and accumulated depreciation up to 31.3.2019. Depreciation allowed in respect of the transmission assets for 2019-24 period are as follows:

(₹ in lakh)

	Asset- I								
SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
Α	Opening Gross Block	4966.07	4966.07	4966.07	4966.07	4966.07			
В	ACE	0.00	0.00	0.00	0.00	0.00			
С	Closing Gross Block (A+B)	4966.07	4966.07	4966.07	4966.07	4966.07			
D	Average Gross Block (A+C)/2	4966.07	4966.07	4966.07	4966.07	4966.07			
Е	Weighted average rate of Depreciation (WAROD) (in %)	15.00	15.00	15.00	7.29	0.00			
F	Elapsed useful life at the beginning of the year	3.00	4.00	5.00	6.00	7.00			
G	Balance useful life at the beginningof the year	4.00	3.00	2.00	1.00	0.00			
Н	Depreciable value	4966.07	4966.07	4966.07	4966.07	4966.07			
ı	Combined Depreciation during the year (D*E)	744.91	744.91	744.91	361.92	0.00			
J	Cumulative Depreciation at the end of the year	3114.33	3859.24	4604.15	4966.07	4966.07			
К	Remaining Aggregate Depreciable Value at the end of the year	1851.74	1106.83	361.92	0.00	0.00			

(₹ in lakh)

		Asse	et-II			
SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Opening Gross Block	960.21	960.21	960.21	960.21	960.21
В	Addition during the year 2019-24 due to projected Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
С	Closing Gross Block (A+B)	960.21	960.21	960.21	960.21	960.21
D	Average Gross Block (A+C)/2	960.21	960.21	960.21	960.21	960.21
Е	Weighted average rate of Depreciation (WAROD) (in %)	15.00	15.00	15.00	15.00	7.63
F	Elapsed useful life at the beginning of the year	2.00	3.00	4.00	5.00	6.00
G	Balance useful life at the beginningof the year	5.00	4.00	3.00	2.00	1.00
Н	Depreciable value	960.21	960.21	960.21	960.21	960.21
I	Combined Depreciation during the year (D*E)	144.03	144.03	144.03	144.03	73.23
J	Cumulative Depreciation at the end of the year	454.89	598.92	742.95	886.98	960.21

	Asset-II								
SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
К	Remaining Aggregate Depreciable Value at the end of the year	505.32	361.29	217.26	73.23	0.00			

Interest on Loan ("IoL")

- 81. 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 decapitalization 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".



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

(₹ in lakh)

	Asset-I										
SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24					
Α	Gross Normative Loan	3476.25	3476.25	3476.25	3476.25	3476.25					
В	Cumulative Repayments upto Previous Year	2369.42	3114.33	3476.25	3476.25	3476.25					
С	Net Loan-Opening (A-B)	1106.83	361.92	0.00	0.00	0.00					
D	Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00					
Е	Repayment during the year	744.91	361.92	0.00	0.00	0.00					
F	Net Loan-Closing (C+D-E)	361.92	0.00	0.00	0.00	0.00					
G	Average Loan (C+F)/2	734.38	180.96	0.00	0.00	0.00					
Н	Weighted Average Rate of Interest on Loan (in %)	8.55	8.52	8.54	8.56	8.58					
I	Interest on Loan (G*H)	62.78	15.42	0.00	0.00	0.00					

(₹ in lakh)

	Asset-II										
SI.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24					
No.											
Α	Gross Normative Loan	672.15	672.15	672.15	672.15	672.15					
В	Cumulative Repayments upto Previous Year	310.86	454.89	598.92	672.15	672.15					
С	Net Loan-Opening (A-B)	361.29	217.26	73.23	0.00	0.00					
D	Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00					
Е	Repayment during the year	144.03	144.03	73.23	0.00	0.00					
F	Net Loan-Closing (C+D-E)	217.26	73.23	0.00	0.00	0.00					
G	Average Loan (C+F)/2	289.27	145.24	36.61	0.00	0.00					
Н	Weighted Average Rate of Interest on Loan (in %)	7.90	7.89	7.94	8.01	8.00					
I	Interest on Loan (G*H)	22.85	11.46	2.91	0.00	0.00					

Return on Equity("RoE")

- 83. 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 cut-off date beyond the original scope excluding Additional Capitalization on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to celling 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."



84. The Petitioner has submitted that MAT rate is applicable to it. Accordingly, 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 considered in respect of the transmission assets under Regulation 30 of the 2019 Tariff Regulations is as follows:

(₹ in lakh)

		Asset-				•
SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Opening Equity	1489.82	1489.82	1489.82	1489.82	1489.82
В	ACE	0.00	0.00	0.00	0.00	0.00
С	Closing Equity (A+B)	1489.82	1489.82	1489.82	1489.82	1489.82
D	Average Equity (A+C)/2	1489.82	1489.82	1489.82	1489.82	1489.82
Е	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Н	Return on Equity (Pre-tax) (D*G)	279.82	279.82	279.82	279.82	279.82

(₹ in lakh)

		Asset-	II			•
SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Opening Equity	288.06	288.06	288.06	288.06	288.06
В	ACE	0.00	0.00	0.00	0.00	0.00
С	Closing Equity (A+B)	288.06	288.06	288.06	288.06	288.06
D	Average Equity (A+C)/2	288.06	288.06	288.06	288.06	288.06
Е	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Н	Return on Equity (Pre-tax) (D*G)	54.10	54.10	54.10	54.10	54.10

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

85. The Petitioner has not claimed any O&M Expenses during 2019-24 tariff period.

Interest on Working Capital ("IWC")

86. Regulation 34(1)(c), Regulation 34(3), 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;
- 87. 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% plus 350 basis points) for 2021-22 and 10.50% (SBI 1 year MCLR applicable as on 1.4.2022 of 7.10% plus 350 basis points) for 2022-24. The components of the working capital and interest allowed thereon in respect of the transmission assets are as follows:

(₹ in lakh)

		Asse	et-l			
SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (Equivalent to annualized O&M expenses for one month)	0.00	0.00	0.00	0.00	0.00
В	Working Capital for Maintenance Spares (Equivalent to 15% of O&M expenses)	0.00	0.00	0.00	0.00	0.00
С	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	135.72	130.04	127.99	80.16	34.85
D	Total Working Capital (A+B+C)	135.72	130.04	127.99	80.16	34.85
Е	Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
F	Interest of working capital (DxE)	16.35	14.63	13.44	8.42	3.66

(₹ in lakh)

		Asse	t-II			
SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Working Capital for O&M Expenses (Equivalent to annualized O&M expenses for one month)	0.00	0.00	0.00	0.00	0.00
В	Working Capital for Maintenance Spares (Equivalent to 15% of O&M expenses)	0.00	0.00	0.00	0.00	0.00
С	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	27.58	26.20	25.11	24.75	15.86
D	Total Working Capital (A+B+C)	27.58	26.20	25.11	24.75	15.86
Е	Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
F	Interest of working capital (DxE)	3.32	2.95	2.64	2.60	1.67

Annual Fixed Charges for 2019-24 Tariff Period

88. Annual Fixed Charges (AFC) allowed in respect of the transmission assets for 2019-24 tariff period are as follows:

(₹ in lakh)

	As	set-l			•
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	744.91	744.91	744.91	361.92	0.00
Interest on Loan	62.78	15.42	0.00	0.00	0.00
Return on Equity	279.82	279.82	279.82	279.82	279.82
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	16.35	14.63	13.44	8.42	3.66
Total	1103.86	1054.78	1038.17	650.16	283.48

(₹ in lakh)

	As	set-II			, ,
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	144.03	144.03	144.03	144.03	73.23
Interest on Loan	22.85	11.46	2.91	0.00	0.00
Return on Equity	54.10	54.10	54.10	54.10	54.10
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	3.32	2.95	2.64	2.60	1.67
Total	224.30	212.54	203.68	200.73	129.00

Filing Fee and Publication Expenses

89. 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. 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

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

91. The Petitioner has submitted that GST, if it is levied at any rate and at any point

of time in future on charges of transmission of electricity, the same will be borne and

additionally paid by the Respondent(s) to the Petitioner and the same will 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...

92. We have considered the submission of the Petitioner. Since, GST is not levied

on transmission services at present, we are of the view that Petitioner's prayer is

premature.

Security Expenses

93. The Petitioner has submitted that security expenses for the transmission assets

are not claimed in the instant petition and it would file a separate petition for claiming

the overall security expenses and the consequential IWC.

94. We have considered the submissions of the Petitioner. The Petitioner has

claimed consolidated security expenses on projected basis for the 2019-24 tariff

period on the basis of actual security expenses incurred in 2018-19 in Petition No.

260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No.

260/MP/2020 approved security expenses from 1.4.2019 to 31.3.2024. Therefore,

security expenses will be shared in terms of the order dated 3.8.2021 in Petition No.

260/MP/2020. Accordingly, the Petitioner's prayer in the instant petition for allowing

it to file a separate petition for claiming the overall security expenses and

consequential IWC has become infructuous.

A.

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Capital Spares

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

The transmission charges shall be recovered from the respective States as per provision of Regulation 43(2) of the 2014 Tariff Regulations for 2014-19 tariff period and as per the Regulation 57(2) of the 2019 Tariff Regulations for 2019-24 tariff period.

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

98. To summarise:

Trued-up AFC approved in respect of the transmission assets for 2014-(a) 19 tariff period are as follows:

(₹ in lakh)

Asset- I							
Particulars	2015-16 (Pro-rata for 92 days)	2016-17	2017-18	2018-19			
AFC	306.77	1288.10	1241.09	1192.32			

(₹ in lakh)

Asset-II								
Particulars	2016-17 (Pro-rata for 122 days)	2017-18	2018-19					
AFC	64.73	230.87	236.29					

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

(₹ in lakh)

Assets	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-I	1103.86	1054.78	1038.17	650.16	283.48
Asset-II	224.30	212.54	203.68	200.73	129.00

- 99. Annexure-I to Annexure-IV given hereinafter form part of the order.
- 100. This order disposes of Petition No. 711/TT/2020 in terms of the above discussions and findings.

sd/-(P. K. Singh) Member

sd/-(Arun Goyal) Member

sd/-(I. S. Jha) Member

Asset - I Annexure–I

2014-19	Admitted Capital Cost as on	ACE (₹ in lakh)	Admitted Capital Cost as on	Rate of Depreciation	Annual Depreciation as per Regulations					
Capital Expenditure as on COD	COD (₹ in lakh)	2014-19	31.3.2019 (₹ in lakh)	(in %)	2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)	
I.T. Equipment	4043.37	922.70	4966.07	15	0.00	662.33	722.32	735.70	744.91	
TOTAL	4043.37	922.70	4966.07		0.00	662.33	722.32	735.70	744.91	
	Average Gross Block (₹ in lakh)		0.00	4415.53	4815.47	4904.65	4966.07			
			Weighted Average Rate of Depreciation (in %)		0.00	15.00	15.00	15.00	15.00	

Asset - II Annexure-II

2014-19	Admitted Capital Cost as on	ACE (₹ in lakh)	Admitted Capital Cost as on	Rate of Depreciation	А	nnual Depre	ciation as per Regulations		
Capital Expenditure as on COD	COD (₹ in lakh)	2014-19	31.3.2019 (₹ in lakh)	(in %)	2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
I.T. Equipment	604.99	355.22	960.21	15	0.00	0.00	108.20	132.75	141.94
TOTAL	604.99	355.22	960.21		0.00	0.00	108.20	132.75	141.94
		Average Gro (₹ in lakh)	Average Gross Block (₹ in lakh)		0.00	721.36	885.01	946.26	
			Weighted Average Rate of Depreciation (in %)		0.00	0.00	15.00	15.00	15.00

Annexure-III

				Asset-I						
2019-24	Admitted Capital Cost	ACE	Admitted Capital Cost as	Rate of	Annual Depreciation as per Regulations					
Capital Expenditure as on 1.4.2019	as on 1.4.2019 (₹ in lakh)	2019-24	on 31.3.2019 (₹ in lakh)	Depreciation (in %)	2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)	
I.T. Equipment	4966.07	0.00	4966.07	15.00	744.91	744.91	744.91	361.92	0.00	
TOTAL	4966.07	0.00	4966.07		744.91	744.91	744.91	361.92	0.00	
			Average Gross Block (₹ in lakh)		4966.07	4966.07	4966.07	4966.07	4966.07	
			Weighted Average Rate of Depreciation (in %)		15.00	15.00	15.00	7.29	0.00	

Annexure-IV

Assets-II									
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 (in %)	Annual Depreciation as per Regulations				
Capital Expenditure as on 1.4.2019		2019-24			2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
I.T. Equipment	960.21	0.00	960.21	15	144.03	144.03	144.03	144.03	73.23
TOTAL	960.21	0.00	960.21		144.03	144.03	144.03	144.03	73.23
			Average Gross Block (₹ in lakh)		960.21	960.21	960.21	960.21	960.21
			Weighted Average Rate of Depreciation (in %)		15.00	15.00	15.00	15.00	7.63