CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

<u>Petition No. 666/TT/2020</u>

Coram:

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

Date of Order: 06.06.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for determination of transmission tariff from COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of "Replacement of existing 315 MVA, 400/220 kV ICT II with 500 MVA, 400/220 kV ICT-II at Pusauli Sub-station" under "Eastern Region Strengthening Scheme XII" in Eastern Region.

And in the matter of:

Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2, Sector 29,
Gurgaon -122 001 (Haryana). **….Petitioner**

Vs.

1. Bihar State Power (Holding) Company Limited,
(Formerly Bihar State Electricity Board -BSEB)
Vidyut Bhavan, Bailey Road,
Patna – 800001.

2. West Bengal State Electricity Distribution Company Limited,
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City,
Calcutta – 700091.

3. Grid Corporation of Odisha Limited,
Shahid Nagar,
Bhubaneswar – 751007.

4. Jharkhand State Electricity Board,

In front of Main Secretariat, Doranda,
Ranchi-834002.

5. Damodar Valley Corporation,
DVC Tower, Maniktala,
Civic Centre, VIP road,
Calcutta -700054.

6. Power Department,
Government of Sikkim,
Gangtok -737101. **…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 : Ms. Rohini Prasad, Advocate, BSPHCL

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, a deemed transmission licensee, for determination of transmission tariff for the period from the date of commercial operation 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 “Replacement of existing 315 MVA, 400/220 kV ICT-II with 500 MVA, 400/220 kV ICT-II at Pusauli Sub-station” (hereinafter referred to as “transmission asset”) under “Eastern Region Strengthening Scheme XII” in Eastern Region (hereinafter referred to as “the transmission project”).

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

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

2) Approve the Transmission Tariff for the tariff period 2019-24 block for the asset covered under this petition, as per para –8.2 above.

3) Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/ Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8 above for respective block.

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

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

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

7) Allow the Petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 8.8 above.

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

9) 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.

10) Allow interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.
and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice."

Background

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

(a) The Investment Approval (hereinafter referred to as "IA") of the transmission project was accorded by Board of Directors of Petitioner's Company vide Memorandum Ref.: C/CP/ERSS-XII in ER dated 19.5.2014 for

₹52229.00 lakh including an IDC of ₹3324.00 lakh for ER based on February 2014 price level. Further, The Revised Cost Estimate-I (RCE-I) of the transmission project was accorded by the Board of Directors of POWERGRID vide C/CP/PA 16-17-03-0AE-RCE019 under ERSS-XII project in ER dated 30.3.2017 for ₹55018.00 lakh including an IDC of ₹1700.00 lakh for ER based on December 2016 price level. Further, The Revised Cost Estimate-II (RCE-II) of the transmission project was accorded by the Board of Directors of POWERGRID vide C/CP/PA 18-19-12-0AT-RTE018 under ERSS-XII project in ER dated 14.3.2019 for ₹54636.00 lakh including an IDC of ₹2403.00 lakh for ER based on October 2018 price level.

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

<u>Sub-stations</u>

(i) Reactive Compensation at 400 kV Sub-stations

- Installation of 1X125 MVAR Bus Reactor at Baripada with GIS bay.
- Installation of 1X125 MVAR Bus Reactor at Maithon with GIS bay.
- Conversion of 50 MVAR Line Reactor presently installed at Jeerat end of Baharampur-Jeerat 400 kV line as Bus Reactor in parallel with existing Bus Reactor at Jeerat.

(ii) Augmentation of Transformation Capacity

- Addition of 1x500 MVA, 400/220 kV ICT with GIS bays at Baripada 400/220/132kV sub-station of POWERGRID.
- Replacement of 2X315 MVA, 400/220 kV ICTs with 2X500 MVA, 400/220 kV ICTs at Purnea
- Replacement of 2X315 MVA, 400/220 kV ICTs with 2X500 MVA, 400/220 kV ICTs at Patna
- Replacement of 2X315 MVA, 400/220 kV ICTs with 2X500 MVA, 400/220 kV ICTs at Pusauli
- Shifting of 1X315 MVA, 400/220 kV ICT from any suitable location (after replacement by 1x500MVA ICT) and install it at Jamshedpur 400/220 kV Sub-station as 3rd ICT along with associated bays

- Shifting of 1X315 MVA, 400/220 kV ICT from any suitable location (after replacement by 1x500MVA ICT) and install it at Farakka 400/220 kV Sub-station as 2nd ICT along with associated bays
- Out of the 6 nos. 315 MVA ICTs released from Purnea, Patna and Pusauli Sub-stations, one each would be kept as spare at Patna and Pusauli Sub-station, one each would be diverted to Jamshedpur and Farakka Sub-station and remaining 2x315 MVA, 400/220kV ICTs would be utilized as Regional Spare
- Replacement of 1X100 MVA (3rd ICT), 220/132kV ICTs with 1X160 MVA, 220/132 kV ICT at Purnea 220/132 kV sub-station of POWERGRID, along with necessary bay equipment /protection system
- Replacement of existing 100 MVA, 220/132kV ICTs with 1X160 MVA, 220/132 kV ICT at Siliguri 220/132 kV sub-station of POWERGRID, along with necessary bay equipment /protection system
- Replacement of existing 100 MVA, 220/132kV ICTs with 1X160 MVA, 220/132 kV ICT at Birpara 220/132 kV sub-station of POWERGRID, along with necessary bay equipment /protection system
- 100 MVA ICTs thus released from Purnea, Siliguri and Birpara shall be kept in the regional pool of spare ICTs

(iii) 2 number 500 MVA Single Phase Spare Unit of 765/400 kV ICT for Eastern Region Procurement of two 500 MVA, Single Phase unit of 765/400 kV ICT for Eastern Region to be stationed at Angul and Jharsuguda sub-station.

(iv) 1 number Spare unit of 765 kV, 110 MVAR Single Phase Reactor to be stationed at Sasaram.

(v) Modification of 132 kV bus arrangement including switchgear to Double Main Scheme at 220/132 kV Siliguri and Purnea Sub-station with GIS bays

(vi) Construction of 4 nos. 220 kV line bays at Kishanganj sub-station of POWERGRID.

(c) The details of the transmission assets covered under the transmission project are as follows:

Name of Asset	Actual DOCO	Petition No.
Asset-I: Replacement of existing 100 MVA, 220/132 kV ICT with 01 No. 1X160 MVA ICT at 220/132 kV Birpara Sub-station along with associated bays at Birpara Sub-station	1.1.2016	Covered under Petition No.69/TT/2016 for Tariff period

Asset-II: Replacement of existing 100 MVA, 220/132 kV ICT with 1x160 MVA, 220/132 kV ICT at 220/132 kV Siliguri Sub-station along with necessary bay eqpt/ protection system at Siliguri Sub-station	2.2.2016	2014-19)
Asset III: Replacement of 315 MVA 400/220 KV ICT I with 500 MVA 400/220 kV ICT at Patna Sub-station	24.9.2016	
Asset IV: Replacement of 315 MVA 400/220 KV ICT II with 500 MVA 400/220 kV ICT at Patna Sub-station	17.2.2019	
Asset V: Replacement of 315 MVA 400/220 KV ICT I with 500 MVA 400/220 kV ICT at Pusauli Sub-station	3.4.2016	
Asset-VI: Replacement of 315 MVA 400/220 kV ICT II with 500 MVA 400/220 kV ICT at Purnea	30.9.2016	
Asset-VII: Replacement of 1x 100 MVA (3rd) ICT with 1x160 MVA220/132 kV ICT at Purnea Sub-station	29.2.2016	
Asset-VIII: 01 No of 1X125 MVAR Bus Reactor at Baripada Sub-station with GIS bay	2.10.2016	
Asset-IX: 01 Nos of 1X500 MVA, 400/220/132 kV ICT at 400/220/132 kV Baripada Sub-station along with GIS bays	2.10.2016	
Asset I: Conversion of 50 MVAR Line Reactor (presently installed at Jeerat end of 400 kV Baharampur-Jeerat TL) as Bus Reactor in parallel with existing Bus Reactor at Jeerat	29.8.2016	Covered under Petition No.233/TT/2016 for Tariff period 2014-19)
Asset II: Installation of 01 no. 125 MVAR Bus Reactor at Maithon Sub-station with GIS bays	6.10.2016	
Asset III(a): 02 nos 220 kV GIS Line Bays at Kishanganj Sub-station	20.10.2016	
Asset III(b): 02 nos 220 kV GIS Line Bays at Kishanganj Sub-station	10.3.2017	
Asset IV(a): Modification of 132 kV Bus arrangement at 220/132 kV Siliguri Sub-station with GIS bays	30.11.2016	
Asset I: Shifting of 1x315 MVA, 400/220 kV ICT from any suitable location (after replacement by 1x500 MVA ICT) and install it at Jamshedpur 400/220 kV Sub-station as 3rd ICT along-with associated bays	16.12.2017	Covered under Petition No.277/TT/2018 for Tariff period 2014-19)
Asset II: Modification of 132 kV Bus arrangement with GIS bays at 220/132 kV Purnea Sub-station	12.3.2018	
Asset-III: Spare 1 no unit of 765 KV,110 MVAR Single Phase Reactor to be stationed at Sasaram	29.3.2018	
Asset-IV: 3rd 500 MVA, 400/220 kV ICT at Patna (POWERGRID) Sub-station along-with associated bay	14.2.2018	
Asset-V: 01 No 500 MVA Single phase spare unit of 765/400 kV ICT at Angul Sub-station	25.9.2017	
Asset-VI: 01 No 500 MVA Single phase spare unit of 765/400 kV ICT at Sundergrah Sub-station	30.9.2018	
Asset-XXI: Replacement of 315 MVA 400/220 kV ICT I with 500 MVA 400/220 kV ICT at Purnea Sub-station	13.7.2015	Covered under Petition No.232/TT/2015)
Replacement of existing 315 MVA, 400/220 kV ICT II with 500 MVA, 400/220 kV ICT-II at Pusauli Sub-station	18.1.2020	**Covered under instant petition**

(d) The Petitioner has submitted that the replaced 315 MVA ICT from Pusauli Sub-station was initially used as Regional Spare and now it will be reused as ICT-4 at Jeypore Sub-station under ERSS XVII Part B Project.

(e) As per IA dated 13.5.2014, the transmission assets were scheduled to be put into commercial operation within 30 months from the date of approval of Board of Directors i.e., by 13.11.2016.

(f) The details of the instant transmission asset including SCOD, COD and time over-run are as follows:

SCOD	COD claimed	Time over-run (days)
13.11.2016	18.1.2020	1161 days

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

(₹ in lakh)

Particulars	2019-20 (Pro-rata for 74 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	21.89	114.35	120.40	121.92	122.43
Interest on Loan	22.51	112.13	108.97	100.92	91.77
Return on Equity	23.36	122.03	128.49	130.11	130.65
Interest on working capital	2.60	13.35	13.77	14.00	14.14
O&M Expenses	36.19	185.50	192.00	199.00	205.50
Total	**106.55**	**547.36**	**563.63**	**565.95**	**564.49**

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

(₹ in lakh)

Particulars	2019-20 (Pro-rata for 74 days)	2020-21	2021-22	2022-23	2023-24
O&M Expenses	14.92	15.46	16.00	16.58	17.13
Maintenance Spares	26.85	27.83	28.80	29.85	30.83
Receivables	64.79	67.48	69.49	69.77	69.40
Total	106.56	110.77	114.29	116.20	117.36

Particulars	2019-20 (Pro-rata for 74 days)	2020-21	2021-22	2022-23	2023-24
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	**2.60**	**13.35**	**13.77**	**14.00**	**14.14**

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

7. The Petitioner has served the petition on the Respondents and notice of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. BSHPCL, Respondent No.1 has filed its reply vide affidavit dated 2.11.2021 and has raised issues like details of assets, time over-run, Initial Spares, ACE, IDC, IEDC, Interest on Loan, security expenses and filing fee. The Petitioner vide affidavit dated 11.11.2021 has filed rejoinder to the reply of BSHPCL. The issues raised by BSHPCL and the clarifications given by the Petitioner are considered in relevant portions of the order.

8. The hearing in this matter was held on 29.10.2021 through video conference and order was reserved.

9. This order is issued considering the submissions made in the petition, affidavit dated 10.9.2021, reply of BSPHCL and the rejoinder filed by the Petitioner.

10. Having heard the representatives of the parties and having perused the material on record, we proceed to dispose of the petition.

11. BSPHCL has submitted that the Petitioner has not submitted the details and status of the replaced 315 MVA ICT from Pusauli Sub-station to be reused as ICT-4 at Jeypore Sub-station under ERSS-XVII Part-B project. In response, the Petitioner vide its rejoinder has submitted a copy of Minutes of the 33rd ERPC and 18th SCM.

12. We have considered the submissions of the Petitioner and BSPHCL. It is observed that the Petitioner has filed Petition No 390/TT/2019 for true-up of 2014-19 tariff period, wherein the Petitioner has submitted that 315 MVA ICT at Sasaram (Pusauli) is removed from regular operation on 28.2.2016 and the same has been de-capitalised from the Bihar Grid Strengthening Scheme in Eastern Region. Therefore, the 315 MVA ICT at Sasaram (Pusauli) will be decapitalised in Petition No.390/TT/2019.

<u>Date of Commercial Operation ("COD")</u>

13. The Petitioner has claimed COD of the transmission asset as 18.1.2020. In support of COD of the transmission asset, the Petitioner has submitted copy of Central Electricity Authority (CEA) Energisation Certificate dated 11.1.2020 under Regulation 43 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 and RLDC charging certificate dated 18.2.2020, self-declaration of COD letter dated 24.1.2020 and CMD certificate as per Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2016 (Grid Code).

14. Taking into consideration CEA energisation certificate, RLDC charging certificate and CMD certificate as required under the Grid Code, COD of the transmission asset is approved as 18.1.2020.

Capital Cost

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

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

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

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

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

(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;

(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;

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

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

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

(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."

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

(a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and

(b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.

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

(a) The Asset-forming part of the project, but not in use, as declared in the tariff petition;

(b) De-capitalised Asset-after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

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

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

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

16. The Petitioner vide Auditor Certificate dated 3.6.2020 has submitted the capital cost incurred upto COD and Additional Capital Expenditure (ACE) projected to be incurred, in respect of the transmission asset and the same is as follows:

(₹ in lakh)

FR approved cost	RCE-I approved cost	RCE-II approved cost	Cost as on COD	Projected ACE				Estimated completion cost
				2019-20	2020-21	2021-22	2022-23	
2055.72	2320.10	2320.10	2086.90	39.66	134.52	38.43	19.22	2318.73

Cost Over-run

17. The estimated completion cost of the transmission asset based on the Auditor's certificate is ₹2318.73 lakh including IEDC and IDC. The estimated completion cost is within the RCE-II approved capital cost of ₹2320.10 lakh. The Petitioner has submitted Form-5 and justification for cost variation from FR cost of ₹2055.72 lakh to completion cost of ₹2318.73 lakh as on 31.3.2024.

18. The Petitioner submitted that the overall estimated completion cost of the asset is within the RCE apportioned approved cost. Further, regarding variation in cost of individual item, the Petitioner has 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. Further, lowest bidder can be arrived at/ evaluated on overall basis. Hence, item-wise unit prices in contracts and its variation over unit rate considered in FR estimates are beyond the control of the Petitioner. Being a Government enterprise, the Petitioner

has been following a well laid down procurement policy which ensures both transparency and competitiveness in the bidding process. Through this process, lowest possible market prices for required product/services are obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market forces, bidder's perception and site requirements, whereas, the estimates are prepared by the Petitioner as per well-defined procedures. The FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts/ general practice.

19. We have considered the submissions of the Petitioner. As compared with FR cost, the estimated completion cost is more by ₹263.01 lakh. The Petitioner has submitted RCE-I and RCE-II duly approved by the Board of Directors of the Petitioner and the revised apportioned approved cost as per RCE-I and RCE-II is ₹2320.10 lakh. The estimated completion cost of ₹2318.73 lakh as on 31.3.2024 is within the apportioned approved cost. Therefore, there is no cost over-run in execution of the assets.

<u>Time Over-run</u>

20. As per the IA dated 13.5.2014, the transmission assets covered in the transmission project were scheduled to be put into commercial operation within 30 months from the date of IA. Accordingly, the scheduled COD was 13.11.2016 against which the transmission asset was put into commercial operation on 18.1.2020 after a time over-run of 1161 days. The Petitioner has submitted that supply of ICT was

inordinately delayed by GE T&D India limited. The supply of ICT took place only on 2.4.2018 instead of planned supply of 3.10.2015. It was further delayed from 20.4.2018 to 30.11.2020 i.e. around 589 days due to getting shutdown clearance from BSPTCL. The Petitioner has submitted that after the continuous follow up with BSPTCL from 20.4.2018 and the shutdown was finally granted on 30.11.2020.

21. BSPHCL has made the following submissions regarding time over-run:

a. The Petitioner has failed to provide detailed, date wise, chronological reasons for time over-run and has failed to give reasons for delay from 14.11.2016 to 20.4.2018.

b. A perusal of email dated 20.4.2018 shows that with respect to 315 MVA ICT-2, the shutdown has been requested from 27.4.2018 to 30.5.2018 while the shutdown approved in 143rd OCC has been stated to be from 20.4.2018 to 20.5.2018 and with respect to 500 MVA ICT-I shut down has been requested on 25.4.2018 while approved shut down date in 143rd OCC has been stated to be 5.4.2018.

c. RTAMC Patna had submitted the shutdown request on 21.4.2018 for the period 27.4.2018 to 30.5.2018. The Ara (PG), Pusauli (BSPTCL) and Dehri Sub-stations were drawing power around 270MW and 220 kV Sahupuri (UP) was also drawing 180-190 MW from Pusauli (PG) (1x500 MVA + 1x315 MVA). Total load at Pusauli (PG) was around 460 MW which was not possible to feed through available one 500 MVA ICT. Further, load of Pusauli (PG) could not be shifted on Gaya (PG) because 220 kV Bodhgaya (324 MW), Dehri (193 MW) and Sonenagar (237 MW) Sub-stations were drawing power from Gaya (PG) (1x500 MVA+1x315 MVA) due to which Gaya (PG) Sub-station remained overloaded (650 MW). Khizisarai Sub-station was also about to charge sooner from Gaya (PG), which might cause further overloading at Gaya (PG). Therefore, SLDC Patna requested to PGCIL to defer the shutdown till November-December 2018 to avoid severe load restrictions in Gaya and Pusauli region.

d. From the e-mails annexed with the instant petition regarding exchanges with GE T&D and within PCIL, it is also apparent that there was lack of clarity regarding the dates shut down was requested for. In the e-mail dated 9.10.2018, it was stated that shut down was applied in 150th OCC from 16.11.2018 to 19.11.2018 with respect to 500 MVA ICT-1 and from 20.11.2018 to 25.12.2018 with respect to 315 MVA ICT-II, and the request was accordingly made, but in the e-mail dated 27.10.2018, the dates for shut down requirement were sought to be modified to 20.11.2018 to 23.11.2018 for ICT-1 and 24.11.2018 to 29.12.2018 for ICT-2 as mobilization could be stated to be done by 19.11.2018.

e. The Petitioner had requested for shutdown for replacement of ICTs at Patna and Pusauli Sub-stations in 150th OCC meeting held on 11.10.2018. SLDC had opined that ICT replacement work at Patna should be completed before Pusauli. Hence, SLDC had accorded consent for shutdown of 315 MVA ICT-II at Patna (PG) on 15.11.2018 for 30.11.2018 to 25.12.2018, but the replacement work at Patna was not completed as per consent and it was charged on 15.2.2019 after delay of 50 days.

f. From the e-mail dated 10.1.2019 sent by the Petitioner to SLDC BSEB, it is clear that as per the Petitioner, the work of replacement of 315 MVA with 500 MVA at Patna was taking longer and it was only thereafter that they expected to take up replacement work of 315 MVA transformer at Pusauli. This is also clear from the Petitioner's internal e-mail dated 7.2.2019 wherein reference has been made to approval for shutdown in 153rd OCC and it has been stated that "shut down during this period was not allowed because Retrofitting work of Transformer at Patna S/s was in progress" and shut down was requested for 500 MVA ICT-I from 20.2.2019 to 23.2.2019 and 315 MVA ICT-II from 24.2.2019 to 31.3.2019.

g. From the e-mail dated 16.2.2019, it emerges that in the 153rd OCC approval of ERPC, it was advised to take approval of shutdown of 220 kV Pusauli-Sahupuri from NRPC during shutdown of 500 MVA ICT-I. This was sent and accorded in 156th OCC from 20.2.2019 to 23.2.2019. But it was requested on 16.2.2019 to accord shutdown approval for ICT-1 at Pusauli and 220 kV Pusauli-Sahupuri S/C from 25.2.2019 to 28.2.2019 and for ICT-II at Pusauli from 1.3.2019 to 5.4.2019.

h. During this period 2019 General Assembly Election was scheduled and Election Commission of India declared model code of conduct from 10.3.2019 and elections were held from 11.4.2019 to 19.5.2019. Keeping in view the precautionary measure to make available 24x7 uninterrupted power supply for different election works as well as for maintaining law and order situation in the state of Bihar, it was not possible to run the system without N-1 compliance of the transformers. Most of the highly sensitive booths/ assemblies were located in the adjoining area of Pusauli. As such it was considered to work safely after completion of election and safe margin of power during working season as the proposed shutdown was for longer period and there was no chance of return of shutdown without commissioning of new power transformer.

i. From the e-mail exchanges of May, 2019, annexed with the petition, regarding shutdown as approved in 156th OCC, it transpires that the deferment at that time was on account of intimation by UPPCL, vide its e-mail dated 22.5.2019, regarding 315 MVA ICT-1 at 400 kV Sarnath being expected to be charged on 31.5.2019 with a request to plan after charging of the said ICT and it was by e-mail dated 7.6.2019 that PGCIL made request to UPPCL regarding shutdown and load restriction in respect of 220 kV Pusauli-Sahupuri.

j. With respect to shutdown requisition from 29.5.2019 to 3.7.2019, in OCC meeting it had been decided that to facilitate this shutdown load on 220 kV Sahupuri (UP)-Pusauli (PG) transmission line must be restricted upto 100 MW for which PGCIL had to take consent from NRLDC, NLDC and UP SLDC. UPSLDC consented for 7.6.2019 onwards due to outage of 315 MVA ICT at Sarnath. Meanwhile, demand of Bihar increased and to ensure N-1 contingency, SLDC Patna suggested to schedule this shutdown in low demand season (November-December 2019).

k. No documents have been brought on record after June 2019, by the

Petitioner.

l. The shutdown as requested by PGCIL was accorded and communicated vide e-mail dated 13.11.2019 by SLDC BSEB, but thereafter, the Petitioner, submitted a revised shutdown proposal vide e-mail dated 14.11.2019 which was consented to on 14.11.2019 itself for 500 MVA ICT-1 from 22.11.2019 to 25.11.2019 and 315 MVA ICT-II from 26.11.2019-27.12.2019.

m. Further, as per Regulation 22 of the 2019 Tariff Regulations, “delay in execution of the project on account of contractor or supplier or agency of the generating company or transmission licensee” is a controllable factor. Thus, delay on account of any inordinate delay by GET&D in supply of ICT ought not to be condoned.

n. The Commission’s order dated 22.8.2016 in Petition No. 69/TT/2016 wherein the asset covered in the instant petition was mentioned as Asset-VI, ought to be taken into account.

22. In response, the Petitioner has submitted that there was a delay of 912 days in supply of ICT as the supply took place only on 2.4.2018 instead of planned supply of 3.10.2015 and further the asset was delayed due to non-availability of shutdown. The Petitioner has also provided a chronology relating to the shutdown and has submitted that after getting the shutdown in November-December 2019, the transmission asset was put into commercial operation on 18.1.2020.

23. We have considered the submissions of the Petitioner and BSPHCL. There is a time over-run of 1161 days. The Petitioner has submitted that it was due to delay in

supply of ICT from the contractor, GE T&D and getting shutdown clearance from BSPTCL.

24. As regards supply of ICT, as per the schedule, the contractor was to supply ICT on 3.10.2015, but the contractor GE T&D has supplied the ICT on 2.4.2018. Regulation 22(1)(b) of the 2019 Tariff Regulations provides as follows:

> *"22. Controllable and Uncontrollable factors: The following shall be considered as controllable and uncontrollable factors for deciding time over-run, cost escalation, IDC and IEDC of the new projects:*
>
> *(1) The "controllable factors" shall include but shall not be limited to the following:*
>
> *a. Efficiency in the implementation of the new projects not involving approved change in scope of such new projects, change in statutory levies or change in law or force majeure events; and*
> *b. Delay in execution of the new projects on account of contractor or supplier or agency of the generating company or transmission licensee."*

25. As per Regulation 22(1)(b) of the 2019 Tariff Regulations, the delay on account of contractor falls under controllable factor. Accordingly, the time over-run due to delay in supply of ICT from GE T&D is not condoned.

26. Further, the Petitioner has submitted that there was a delay of around 589 days from 20.04.2018 to 30.1.2020 due to delay in getting shutdown clearance from BSPTCL. The Petitioner has supported the claims with copies of emails pertaining to internal communications and with other authorities. On scrutiny of copies of emails and various OCC minutes, we observe that the initial shutdown was approved from 20.4.2018 to 20.5.2018 but the Petitioner has not been able to obtain shutdown due to overloading of Pusauli Sub-station and shutdown was denied by BSPTCL. The Petitioner finally obtained shutdown in the 162nd OCC meeting held on 22.10.2019 and obtained shutdown from 9.11.2019 to 14.12.2019. Therefore, we are of the view that the delay from 1.6.2018 to 9.11.2019 was due to delay in obtaining shutdown

approval from BSPTCL and the same is beyond the control of the Petitioner. Accordingly, the time over-run of 526 days is condoned due to delay in approval of shutdown from BSPTCL. The details of time over-run not condoned is as follows:

SCOD	COD claimed	Time over-run (days)	Time over-run condoned (days)	Time over-run not condoned (days)
13.11.2016	18.1.2020	1161 days	526 days	635 days

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

27. The Petitioner has claimed IDC in respect of the transmission asset and has submitted the Auditor Certificate dated 3.6.2020 in support of the same. The Petitioner has submitted the computation of IDC along with year-wise details of the IDC discharged.

28. The loan amount as on COD has been mentioned in Form-6 and Form-9C. While going through these documents, it is observed that there is a mismatch in loan amount between IDC statement and in Form-9C. Therefore, the allowable IDC has been worked out based on the available information and relying on loan amount as per Form-9C. The Petitioner is directed to submit the detailed IDC statement by rectifying the above-mentioned deviation at the time of true up.

29. The loan details submitted in Form-9C for 2019-24 tariff period and IDC computation statement have been considered for the purpose of IDC calculation on cash basis and on accrued basis. Further, adjustment on account of time over-run has been done to arrive at the admissible IDC. IDC on cash basis up to COD has been worked out based on loan details given in Form-9C for the transmission asset

and it is allowed provisionally. The Petitioner is directed to provide documentary evidence for the same at the time of truing up.

30. Accordingly, based on the information furnished by the Petitioner, IDC considered, is as follows:

(₹ in lakh)

IDC Claimed	IDC allowed	IDC disallowed due to time over run/ Computational Difference	IDC Discharged as on COD	IDC Un-discharged as on COD	IDC Discharge During
					2019-20
A	B	C=(A-B)	D	E=(B-D)	F
288.92	122.01	166.91	122.01	0.00	0.00

31. The Petitioner has claimed IEDC for the transmission asset and has submitted Auditor's Certificate in support of the same. The Petitioner has also submitted that entire IEDC has been discharged as on COD in respect of the transmission asset. It is observed that IEDC claimed is within limit as per FR/RCE. Accordingly, pro-rata IEDC allowed and disallowed for the transmission asset are as follows:

(₹ in lakh)

IEDC claimed as per Auditor Certificate	Pro-rata IEDC disallowed due to time overrun	Pro-rata IEDC allowed as on COD
1	2	3=(1-2)
236.05	72.20	163.85

Initial Spares

32. Initial Spares are provided in Regulation 23(d) of the 2019 Tariff Regulations subject to the following ceiling norms:

> *"(d) Transmission system*
> *(i) Transmission line – 1.00%*
> *(ii) Transmission Sub-station*
> *Green Field – 4.00%*
> *Brown Field – 6.00%*
> *(iii) Series Compensation devices and HVDC Station – 4.00%*

(iv) Gas Insulated Sub-station (GIS)
Green Field – 5.00%
Brown Field – 7.00%
(vi) Communication system – 3.5%
……………………………………………………"

33. The Petitioner has claimed the Initial Spares under Regulation 23 of the 2019 Tariff Regulations in respect of the instant asset as follows:

(₹ in lakh)

Particulars	Plant and machinery cost (excluding IDC, IEDC, land cost and cost of civil works) (A)	Initial Spares Claimed (B)	Ceiling Limit (%) (C)	Initial Spares Worked Out	Excess Initial Spares
				D = [(A-B)*C/(100-C)]	
Sub-station GIS	1684.77	59.50	7.00	122.33	-

34. BSPHCL has submitted that while grating Initial Spares the order dated 22.8.2016 passed by the Commission in Petition No. 69/TT/2016, wherein the asset covered in the instant petition was mentioned as Asset-VI, may be considered. In response, the Petitioner has submitted that the order dated 22.8.2016 was for 2014-19 tariff period whereas the instant petition has been filed for the 2019-24 tariff period and hence has to be governed by the 2019 Tariff Regulations.

35. We have considered the submission of the Petitioner and BSPHCL. The Initial Spares are allowable subject to the ceiling specified in Regulation 23(d) of the 2019 Tariff Regulations. The Petitioner's claim of Initial Spares is within the ceiling limit specified in Regulation 23(d) of the 2019 Tariff Regulations. Accordingly, the details of the Initial Spares allowed in respect of the instant asset for 2019-24 tariff period are as follows:

Sub-station **(₹ in lakh)**

P&M cost		Norms as per	Initial Spares allowable	Initial	Discharge of Initial Spares

considered as on cut-off date	Initial Spares claimed	2019 Tariff Regulations (in %)	as per 2019 Tariff Regulations	Spares allowed	As on COD	2020-21
1684.77	59.50	7.00	122.33	59.50	45.00	14.50

Capital Cost allowed as on COD

36. Accordingly, capital cost allowed in respect of the transmission asset as on COD is as follows:

(₹ in lakh)

Capital Cost claimed in Auditor Certificate as on COD (A)	IDC Disallowed due to time-over run/ Computational difference (B)	Un-discharged IDC as on COD (C)	IEDC Disallowed (D)	Expenditure up to COD (E) = (A-B-C-D)
2086.90	166.91	0.00	72.20	1847.79

Additional Capital Expenditure ("ACE")

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

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

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

(a) Undischarged liabilities recognized to be payable at a future date;

(b) Works deferred for execution;

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

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

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

(f) Force Majeure events:

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

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

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

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

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

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

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

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

e) Force Majeure events;

f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and

g) Raising of ash dyke as a part of ash disposal system.

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

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

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

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

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

38. The Petitioner has claimed projected ACE for 2019-24 tariff period on account of balance and retention payments due to un-discharged liability projected for works

executed within the cut-off date and unexecuted works within cut-off date. The Petitioner has claimed projected ACE as per Auditor's certificate as shown below:

(₹ in lakh)

ACE during 2019-24 period			
2019-20	**2020-21**	**2021-22**	**2022-23**
39.66	134.52	38.43	19.22

39. BSPHCL has submitted that while granting ACE, the order dated 22.8.2016 passed by the Commission in Petition No. 69/TT/2016, wherein the asset covered in the instant petition was mentioned as Asset-VI, may be considered. In response, the Petitioner has submitted that the said order was for the 2014-19 tariff period whereas the instant petition has been filed for the 2019-24 tariff period and hence has to be governed by the 2019 Tariff Regulations.

40. We have considered the submissions of Petitioner and BSPHCL. The ACE claimed on account of balance and retention payments is allowed under Regulations 24(1)(a) of the 2019 Tariff Regulations. ACE allowed in respect of the transmission asset is as follows:

(₹ in lakh)

FR approved cost	**RCE-I approved cost**	**RCE-II approved cost**	**Capital Cost as on COD**	**Admitted ACE**				**Capital Cost as on 31.3.2024**
				2019-20	**2020-21**	**2021-22**	**2022-23**	
2055.72	2320.10	2320.10	1847.79	39.66	134.52	38.43	19.22	2079.62

Debt-Equity Ratio

41. 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."

42. The details of debt-equity considered for the purpose of computation of tariff for 2019-24 period in respect of the transmission asset is as follows:

Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	1293.45	70.00	1455.73	70.00
Equity	554.34	30.00	623.89	30.00
Total	**1847.79**	**100.00**	**2079.62**	**100.00**

Depreciation

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

a) twenty-five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or
b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or

c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life."

44. We have considered the submissions of the Petitioner. WAROD has been worked out and placed as Annexure-I after taking into account the depreciation rates assets as prescribed in the 2019 Tariff Regulations. Depreciation has been worked out considering the admitted capital expenditure as on COD and ACE in 2019-24 period. Depreciation allowed in respect of the transmission asset is as follows:

(₹ in lakh)

Sr. No.	Particulars	2019-20 (Pro-rata for 74 days)	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	1847.79	1887.45	2021.97	2060.40	2079.62
B	ACE	39.66	134.52	38.43	19.22	0.00
C	Closing Gross Block (A+B)	1887.45	2021.97	2060.40	2079.62	2079.62
D	Average Gross Block [(A+C)/2]	1867.62	1954.71	2041.18	2070.01	2079.62
E	Average Gross Block (90% depreciable assets)	1867.62	1954.71	2041.18	2070.01	2079.62
F	Average Gross Block (100% depreciable assets)	0.00	0.00	0.00	0.00	0.00
G	Depreciable value (excluding IT equipment and software) (E*90%)	1680.86	1759.24	1837.07	1863.01	1871.66
H	Depreciable value of IT equipment and software	0.00	0.00	0.00	0.00	0.00
I	Total Depreciable Value (G+H)	1680.86	1759.24	1837.07	1863.01	1871.66
J	Weighted Average Rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
K	Elapsed useful life at the beginning of the year (Year)	0	0	1	2	3
L	Balance useful life at the beginning of the year (Year)	25	25	24	23	22
M	**Depreciation during the year (D*J)**	**19.94**	**103.21**	**107.77**	**109.30**	**109.80**
N	Aggregate Cumulative Depreciation at the end of the year	19.94	123.15	230.92	340.22	450.02
O	Remaining Aggregate	1660.92	1636.09	1606.14	1522.79	1421.64

Sr. No.	Particulars	2019-20 (Pro-rata for 74 days)	2020-21	2021-22	2022-23	2023-24
	Depreciable Value at the end of the year (I-N)					

<u>Interest on Loan ("IoL")</u>

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

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

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

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

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

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

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

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

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

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

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

46. BSPHCL has submitted that IoL may be calculated as contemplated under Regulation 32 of the 2019 Tariff Regulations and nothing in the said Regulations permit the change in interest rate due to floating rate of interest applicable, if any, to be adjusted/ claimed over the tariff period of 5 years directly from/ with the beneficiaries.

47. We have considered the submissions of the Petitioner and BSPHCL. The weighted average rate of interest of IoL has been considered on the basis of the rates prevailing as on COD for respective loans. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up. In view of above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the transmission asset is as follows:

(₹ in lakh)

	Particulars	**2019-20 (Pro-rata for 74 days)**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
A	Gross Normative Loan	1293.45	1321.21	1415.38	1442.28	1455.73
B	Cumulative Repayments up to Previous Year	0.00	19.94	123.15	230.92	340.22
C	Net Loan-Opening (A-B)	1293.45	1301.28	1292.23	1211.36	1115.52
D	Addition due to ACE	27.76	94.16	26.90	13.45	0.00
E	Repayment during the year	19.94	103.21	107.77	109.30	109.80
F	Net Loan-Closing (C+D-E)	1197.56	1196.46	1123.53	1035.63	933.77
G	Average Loan [(C+F)/2]	1192.84	1197.01	1159.99	1079.58	984.70
H	Weighted Average Rate of Interest on Loan (%)	7.817%	7.803%	7.785%	7.771%	7.755%
I	**Interest on Loan (G*H)**	**20.50**	**101.18**	**97.45**	**90.41**	**82.25**

<u>Return on Equity ("RoE")</u>

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

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

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%

Provided further that:

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

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

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

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

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

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

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

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

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

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

(₹ in lakh)

	Particulars	**2019-20 (Pro-rata for 74 days)**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
A	Opening Equity	554.34	566.23	606.59	618.12	623.89
B	Addition due to ACE	11.90	40.36	11.53	5.77	0.00
C	Closing Equity (A+B)	566.23	606.59	618.12	623.89	623.89
D	Average Equity [(A+C)/2]	560.29	586.41	612.36	621.00	623.89
E	Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472
G	Applicable ROE Rate (%)	18.782	18.782	18.782	18.782	18.782
H	**Return on Equity for the year (D*G)**	**21.28**	**110.14**	**115.01**	**116.64**	**117.18**

<u>Operation & Maintenance Expenses (“O&M Expenses”)</u>

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

> *“**35. Operation & Maintenance Expenses:***
>
> ***(3) Transmission system**: (a) The following normative operation and maintenance expenses shall be admissible for the combined transmission system:*

Particulars	***2019-20***	***2020-21***	***2021-22***	***2022-23***	***2023-24***
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	*45.01*	*46.60*	*48.23*	*49.93*	*51.68*
400 kV	*32.15*	*33.28*	*34.45*	*35.66*	*36.91*
220 kV	*22.51*	*23.30*	*24.12*	*24.96*	*25.84*
132 kV and below	*16.08*	*16.64*	*17.23*	*17.83*	*18.46*
Norms for Transformers (₹ Lakh per MVA)					
765 kV	*0.491*	*0.508*	*0.526*	*0.545*	*0.564*
400 kV	*0.358*	*0.371*	*0.384*	*0.398*	*0.411*
220 kV	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*
132 kV and below	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*

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

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

Provided further that:

i. *the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*

ii. *the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*

iii. *the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*

iv. *the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;*

v. *the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW)shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*

vi. *the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.*

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

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

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

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

51. O&M Expenses claimed by the Petitioner and allowed in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2019-20 (Pro-rata for 74 days)	2020-21	2021-22	2022-23	2023-24

Particulars	2019-20 (Pro-rata for 74 days)	2020-21	2021-22	2022-23	2023-24
Transformers:					
Sasaram: ICT II at Pusauli Sub-station					
MVA of each ICT	500.00	500.00	500.00	500.00	500.00
Norms (₹ lakh/MVA)					
400 kV	0.36	0.37	0.38	0.40	0.41
Total Transformer Expenses	179.00	185.50	192.00	199.00	205.50
Total O&M Expenses	**179.00**	**185.50**	**192.00**	**199.00**	**205.50**

<u>Interest on Working Capital ("IWC")</u>

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

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

…..

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

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

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

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

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

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

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

***"3.** Definitions.*

…

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

53. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of 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, 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-22 and 10.60% (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 for the transmission assets are as follows:

(₹ in lakh)

Particulars	**2019-20 (Pro-rata for 74 days)**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Working Capital for O&M Expenses (O&M expenses for one month)	14.92	15.46	16.00	16.58	17.13
Working Capital for Maintenance Spares (15% of O&M expenses)	26.85	27.83	28.80	29.85	30.83
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	61.06	63.12	64.57	64.99	64.76
Total Working Capital	102.83	106.41	109.37	111.42	112.71
Rate of Interest for working capital (in %)	12.05	11.25	10.50	10.60	10.60
Interest of working capital	**2.51**	**11.97**	**11.48**	**11.81**	**11.95**

Annual Fixed Charges for the 2019-24 Tariff Period

54. The transmission charges allowed in respect of the transmission asset for

2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20 (Pro-rata for 74 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	19.94	103.21	107.77	109.30	109.80
Interest on Loan	20.50	101.18	97.45	90.41	82.25
Return on Equity	21.28	110.14	115.01	116.64	117.18
Operation and Maintenance Expense	36.19	185.50	192.00	199.00	205.50
Interest on Working Capital	2.51	11.97	11.48	11.81	11.95
Total	**100.42**	**512.00**	**523.72**	**527.15**	**526.68**

<u>Filing Fee and Publication Expenses</u>

55. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BSPHCL has submitted that grant of filing fee and expenses incurred is the discretion of the Commission and need not necessarily be allowed in all cases and further nothing beyond as contemplated under the 2019 Tariff Regulations may be granted. In response, the Petitioner has submitted that it has requested for reimbursement of expenditure towards petition filing fee and publication expense in terms of Regulation 70(1) of the 2019 Tariff Regulations. Further, the Commission vide order dated 28.3.2016 in Petition No. 137/TT/2015 allowed the recovery of petition filing fee and publication of notices from the beneficiaries on pro-rata basis.

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

Licence Fee and RLDC Fees and Charges

57. 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

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

59. BSPHCL referring to the provision of Regulation 56 of the 2019 Tariff Regulations has submitted that the said Regulation contemplates recovery of statutory charges by generating company and not by transmission licensee and, hence, the said claim is liable to be rejected as the same is premature.

60. We have considered the submissions of the Petitioner and BSPHCL. Since GST is not levied on transmission service at present, we are of the view that Petitioner’s prayer is pre-mature.

Security Expenses

61. The Petitioner has submitted that security expenses in respect of transmission asset are not claimed in the instant petition, and it would file a separate petition for

claiming the overall security expenses and the consequential IWC.

62. BSPHCL has submitted that the claim may only be made as per Regulation 35 (3)(c) of the 2019 Tariff Regulations and the claims to the contrary made by the Petitioner may not be considered as the same are also unsubstantiated and premature. BSPHCL has further submitted that the Commission in its order dated 9.2.2021 in Petition No. 54/TT/2020 has observed that the Petitioner should claim security expenses for all the transmission assets in one petition. In response, the Petitioner has submitted that the a separate Petition no. 260/MP/2020 was filed before the Commission for claiming the overall Security Expenses and consequential IOWC on the same, wherein it was proposed to consider actual security expense incurred by the Petitioner in 2018-19 after escalating the same at 3.51% per annum and estimated additional security expenses for new sub-stations to be commissioned in future, for arriving at the estimated security expense for the year 2019-20, 2020-21, 2021-22, 2022-23 and 2023-24. The Commission vide order dated 3.8.2021 allowed the Petitioner to recover the estimated security expenses from beneficiaries as per provisions of 2020 Sharing Regulations.

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

petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

64. 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

65. 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. The Billing, collection and disbursement of the transmission charges shall be recovered in terms of provisions of the 2010 Sharing Regulations and 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

66. To summarise,

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

(₹ in lakh)

Particulars	2019-20 (Pro-rata for 74 days)	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	100.42	512.00	523.72	527.15	526.68

67. Annexure-I given hereinafter form part of the order.

68. This order disposes of Petition No. 666/TT/2020 in terms of the above discussions and findings.

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

Annexure-I

2019-24 Capital Expenditure as on 1.4.2019	Admitted Capital Cost as on COD (₹ in lakh)	ACE 2019-20	ACE 2020-21	ACE 2021-22	ACE 2022-23	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations 2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Sub Station	1847.79	39.66	134.52	38.43	19.22	**2079.62**	5.28	98.61	103.21	107.77	109.30	109.80
Total	**1847.79**	**39.66**	**134.52**	**38.43**	**19.22**	**2079.62**		**98.61**	**103.21**	**107.77**	**109.30**	**109.80**
					Average Gross Block (₹ in lakh)			1867.62	1954.71	2041.18	2070.01	2079.62
					Weighted Average Rate of Depreciation (%)			5.28	5.28	5.28	5.28	5.28