CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 275/TT/2023

Coram:

Shri Jishnu Barua, Chairperson
Shri Arun Goyal, Member

Date of Order: 29.04.2024

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for determination of transmission tariff from COD to 31.3.2024 for Asset-1 “Replacement of 1*315 MVA, 400/220 kV ICT by 1*500 MVA, 400/220 kV ICT at Ludhiana (PG) Sub-station” covered under "Augmentation of Transformation Capacity at 400/220 kV Ludhiana (PG) Sub-station" in the Northern Region.

And in the matter of:

Power Grid Corporation of India Limited,
SAUDAMINI, Plot No-2,
Sector-29, Gurgaon-122 001
Haryana …**Petitioner**

Versus

1. Ajmer Vidyut Vitran Nigam Limited,
   Corporate Office, Vidyut Bhawan,
   Panchsheel Nagar, Makarwali Road,
   Ajmer-305004.

2. Jaipur Vidyut Vitran Nigam Limited,
   Vidyut Bhawan, Janpath,
   Jyoti Nagar,
   Jaipur-302005.

3. Jodhpur Vidyut Vitran Nigam Limited,
   New Power House, Industrial Area,
   Jodhpur-342003 (Rajasthan).

4. Himachal Pradesh State Electricity Board Limited,
   Vidyut Bhawan,
   Kumar House Complex Building II,
   Shimla-171004.

5. Punjab State Power Corporation Limited,
The Mall, PSEB Head Office,
Patiala-147001.

6. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula-134109.

7. Jammu Kashmir Power Corporation Limited,
220/66/33 kV Gladni Sub-station
SLDC Building, Narwal,
Jammu, Jammu & Kashmir.

8. Uttar Pradesh Power Corporation Limited,
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001.

9. BSES Yamuna Power Limited,
B-Block, Shakti Kiran Building,
Karkadooma,
New Delhi-110092.

10. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi-110019.

11. Tata Power Delhi Distribution Limited,
NDPL House,
Hudson Lines Kingsway Camp,
Delhi-10009.

12. Chandigarh Administration,
Sector -9,
Chandigarh.

13. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun,
Uttarakhand-248001.

14. North Central Railway,
DRM Office, Nawab Yusuf Road
Prayagraj, Uttar Pradesh-211011.

15. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.

16. Punjab State Transmission Corporation Limited,
3rd Floor, Shakti Sadan Building,
Opposite Kaali Mata Mandir,
Patiala, Punjab-147001. …**Respondent (s)**

For Petitioner : Shri Vivek Kumar Singh, PGCIL
Shri Amit Yadav, PGCIL
Ms. Ashita Chauhan, PGCIL

For Respondent **:** None

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited for determination of transmission tariff of the asset, i.e., "Replacement of 1x315 MVA, 400/220 kV ICT by 1x500 MVA, 400/220 kV ICT at Ludhiana (PG) Sub-station (hereinafter referred to as the "transmission asset") under "Augmentation of Transformation Capacity at 400/220 kV Ludhiana (PG) Sub-station" (hereinafter referred to as the "transmission project") in the Northern Region for the period from its COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations").

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

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

2) Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para –8.3 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 claim the overall security expenses and consequential IOWC on that security expenses separately as mentioned at para 8.8 above.*

8) *Allow the initial spare as procured in the current petition in full and Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*

9) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is 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 (IA) of the transmission project was accorded by the Board of Directors (BoD) of the Petitioner's Company in its meeting held on 1.2.2022 vide Memorandum No. C/CP/PA2122-110AAA-IA032 dated 3.2.2022 with an estimated cost of ₹2646 lakh, including an Interest During Construction (IDC) of ₹76 lakh based on September 2021 price level.

b. The scope of the scheme was discussed and agreed upon in the 4th NRPC (TP) meeting held on 5.10.2021 / 12.10.2021, 49th and 50th NRPC meeting held on 27.9.2021 and 28.1.2022, respectively. The Central Transmission Utility of India Limited (CTUIL) vide OM Ref. No. C/CTU/AI/00/1st CCTP dated 16.11.2021 has allocated the transmission project to the Petitioner for implementation under the Regulated Tariff Mechanism (RTM).

c. The scope of work covered under the transmission project broadly includes:

   i. Replacement of 1x315 MVA, 400/220 kV ICT by 1x500 MVA, 400/220 kV ICT at Ludhiana (PG) Sub-station.

400 kV

500 MVA, 400/220 kV ICT: 1 Number
Note: The 315 MVA ICT spared from Ludhiana may be shifted to Bhinmal based on the residual life assessment or refurbishment (if required).

d. The scope of work associated with the transmission project has been completed and is covered under the instant petition.

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in 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 notice published in the newspapers by the Petitioner. None of the Respondents have filed a reply to the petition.

6. This order is issued considering the submissions made by the Petitioner in the petition and the Petitioner's affidavit dated 4.1.2024.

7. The final hearing in this matter was held on 27.2.2024, and the order was reserved.

DETERMINATION OF ANNUAL FIXED CHARGES

8. The Petitioner has claimed the following transmission charges in respect of the transmission asset for the period from its COD to 31.3.2024:

(₹ in lakh)

Particulars	2022-23 (pro-rata for 315 days)	2023-24
Depreciation	49.25	118.95
Interest on Loan	42.64	99.11
Return on Equity	52.56	126.94
Interest on Working Capital	8.41	12.30
O&M Expenses	171.74	205.50
Total	**324.60**	**562.80**

9. The Petitioner has claimed the following Interest on Working Capital (IWC) in respect of the transmission asset for the period from its COD to 31.3.2024:

(₹ in lakh)

Particulars	2022-23 (pro-rata 315 days)	2023-24
O&M Expenses	16.58	17.13
Maintenance Spares	29.85	30.83
Receivables	46.37	69.20
Total Working Capital	92.80	117.16
Rate of Interest (in %)	10.50	10040
Interest on Working Capital	**8.41**	**12.30**

Date of Commercial Operation ("COD")

10. The Petitioner has claimed the COD of the transmission asset as 21.5.2022. The Petitioner has submitted that it has put the transmission asset into commercial operation prior to the SCOD as per the request received from the Punjab State Transmission Corporation Limited (PSTCL), Respondent No. 16, and discussions and deliberations held in various forums.

11. The Petitioner has submitted that the early COD of the transmission asset was discussed in the 49th NRPC meeting held on 27.9.2021. The relevant minutes of the meeting is as follows:

> *"B.9.1 PSTCL informed that load flow studies have been carried out and it is proposed to plan Transmission Works for enhancing ATC/TTC limits to 10,000/10,600MW (considering 1000 MW annual load growth for FY 2022- 23). It was also highlighted that general consumption in the state of Punjab has increased unprecedentedly so the works listed above need to be approved to meet the power supply demand of the state*

in the coming season.

B.9.2 It was again highlighted that scheme may be brought up for discussion in upcoming NRPC (TP) meeting and then may be included in NRPC meeting after approval by NRPC (TP) meeting.

B.9.3 POWERGRID highlighted that timeline for May, 2022 is very ambitious and unlikely to be achieved.

B.9.4 Punjab highlighted that SPS scheme can be implemented as an alternative; however, requested for expeditious augmentation at Ludhiana."

12. The Petitioner has submitted that in the 4th NRPC (TP) meeting held on 5.10.2021/12.10.2021, PSTCL stated that demand in Ludhiana is expected to increase. Therefore, augmentation is needed in Ludhiana Sub-station. PSTCL also requested the Petitioner to explore the possibility of diverting any 500 MVA ICT to Ludhiana to meet the strict time-frame of augmentation by May 2022.

13. The Petitioner has submitted that PSTCL, vide email dated 26.11.2021, requested for utilization of a spare transformer available at Malerkotla or Moga Sub-station so as to augment the capacity at Ludhiana Sub-station before the onset of 2022 paddy season. The Petitioner has submitted that in view of the 50th NRPC meeting held on 28.1.2022, the Petitioner apprised the participating members that it has been requested by PSTCL to utilize 500 MVA ICT lying spare at 400 kV Malerakotla to meet strict timeframe of augmentation by May 2022. The Petitioner has submitted that based on various communications with PSTCL regarding the early execution of the transmission asset, the consent was accorded by CTUIL for the diversion of spare ICT at Malerkotla Sub-station to meet the requirement of PSTCL. Accordingly, a spare 500 MVA ICT available at Malerkotla Sub-station, which is in close proximity (50 km) to Ludhiana Sub-station, was diverted to Ludhiana Sub-station, and the transmission asset was put under commercial operation on 21.5.2022.

14. The Petitioner has also submitted the Central Electricity Authority (CEA)

Energization Certificate, Northern Regional Load Despatch Centre (NRLDC) Charging Certificate, CMD Certificate as required under the Grid Code, and self-declaration COD letter in support of COD of the transmission asset.

15. We have considered the submissions of the Petitioner. The Petitioner has put the transmission asset into commercial operation prior to the SCOD on the request of PSTCL, and it has been discussed and agreed upon in the NRPC, and it has also been approved by the CTUIL. Accordingly, taking into consideration the consent of NRPC and approval of CTUIL for early COD, and the CEA's Energization Certificate, NRLDC Charging Certificate, and CMD Certificate, the COD of the transmission asset is approved as 21.5.2022.

Capital Cost

16. 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 assets before the date of commercial operation;

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

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

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

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

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

(n) Expenditure on account of change in law and force majeure events; and

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

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

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

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

(c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;

(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 upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and

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

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

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

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

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

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

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

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

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

(c) *In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;*
(d) *Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and*
(e) *Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."*

17. The Petitioner, vide Auditor's Certificate dated 20.9.2022, has claimed the following capital cost as on COD and projected Additional Capital Expenditure (ACE) in respect of the transmission asset:

(₹ in lakh)

FR approved cost	Expenditure up to COD	Projected ACE		Estimated completion cost
		2022-23	2023-24	
2646.00	35.42	2090.86	253.25	2379.53

18. The Petitioner has submitted that the approved cost as per IA is ₹2646 lakh and the estimated completion cost is ₹2632.78 lakh as on 31.3.2025. The Petitioner has submitted that the estimated completion cost of the transmission asset is within the FR cost, and there is no cost overrun.

19. We have considered the Petitioner's submissions. The estimated completion cost of the transmission asset is lower than the FR cost by ₹13.22 lakh. Thus, there is no cost overrun in the case of the transmission asset.

20. As per Investment Approval dated 1.2.2022, the scheduled COD of the transmission project was 12 months from the date of IA. Accordingly, the SCOD of the transmission asset is 31.1.2023, against which the transmission asset was put into commercial operation on 21.5.2022. Thus, there is no time overrun in the case of the

transmission asset.

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

21. The Petitioner has not claimed any IDC for the transmission asset. The Petitioner has claimed IEDC of ₹35.42 lakh for the transmission asset as per the Auditor's Certificate. The Petitioner has further submitted that the entire amount of IEDC for the transmission asset has been discharged up to the COD. The IEDC of ₹35.42 lakh claimed by the Petitioner is allowed.

Initial Spares

22. Regulation 23(d) of the 2019 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of plant and machinery cost up to the cut-off date, 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%*
> *(v) Communication System- 3.50%*
> *(vi) Static Synchronous Compensator- 6.00%"*

23. The Initial Spares claimed by the Petitioner is as follows:

(₹ in lakh)

Components of the asset	Plant and Machinery cost for calculation of Initial Spares	Initial Spares Claimed		Norm as per Regulations (in %)
		Amount	(in %)	
Sub-station	2597.36	75.35	2.84	6.00

24. The Petitioner has submitted the year-wise break-up of Initial Spares discharged and claimed as ACE, and it is as follows:

(₹ in lakh)

Sl. No.	Particulars	Initial Spares claimed as ACE
1	Expenditure up to COD	0.00
2	Expenditure during 2022-23	59.00
3	Expenditure during 2023-24	7.38
4	Expenditure during 2024-25	7.38
	Total	**73.76**

25. We have considered the submissions of the Petitioner. The Initial Spares approved for the transmission asset as per Regulation 23(d) of the 2019 Tariff Regulations is as follows:

(₹ in lakh)

Components of the asset	Plant and Machinery cost for calculation of Initial Spares	Initial Spares claimed	Ceiling limit as per Regulations (in %)	Initial Spares allowable	Excess Initial Spares	Initial Spares allowed
Sub-station	2597.36	73.75	6.00	161.08	-	73.75

26. Out of the total allowable Initial Spares of ₹73.75 lakh, Initial Spares to the tune of ₹66.38 lakh are allowed as ACE in 2022-23 and 2023-24. The remaining Initial Spares of ₹7.38 lakh shall be considered in the 2024-29 tariff period. The capital cost allowed on COD is as follows:

(₹ in lakh)

Capital cost claimed as on COD (as per Auditor's Certificate) (A)	IDC disallowed due to time over-run not condoned (B)	Undischarged IDC as on COD (C)	IEDC Disallowed (D)	Excess Initial Spares (E)	Capital Cost as on COD (F) = (A-B- C-D-E)
35.42	-	-	-	-	35.42

Additional Capital Expenditure (ACE)

27. Regulation 24 of the 2019 Tariff Regulations provides as follows:

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

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

(a) Undischarged liabilities recognized to be payable at a future date;
(b) Works deferred for execution;

(c) *Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23of 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."

28. The Petitioner has claimed that the ACE incurred/projected to be incurred is mainly on account of works deferred for execution, and the same is claimed under Regulation 24(1)(b) of the 2019 Tariff Regulations. The details of ACE claimed by the Petitioner are as follows:

(₹ in lakh)

Projected ACE			**Total ACE claimed**
2022-23	**2023-24**	**2024-25**	
2090.86	253.25	253.25	2597.36

29. The Petitioner, vide affidavit dated 4.1.2024, has submitted the following details with respect to deferred works:

(₹ in lakh)

Year	**Amount as per the Auditor's Certificate**	**Nature of Work**	**Amount**	**Claimed under Regulation**
2022-23	2090.86	Towards Erection and Commissioning of TBEA make ICT shifted from Malerkotla Sub-station	90.86	24(1)(b)
		Towards supply of ICT by Hitachi	2000.00	24(1)(b)
2023-24	253.25	Towards balance and retention against supply of ICT and Hitachi	250.07	24(1)(b)
		Towards balance and retention payments against Erection and Commissioning of ICT	3.18	24(1)(b)
2024-25	253.25	Towards balance and retention against supply of ICT and Hitachi	250.07	Under 2024 Tariff
		Towards balance and retention payments against Erection and Commissioning of ICT	3.18	

30. We have considered the submissions of the Petitioner. The Petitioner has replaced the 315 MVA ICT with 500 MVA (TBEA make) Spare ICT from 400 kV Malerkotla. As per the original plan, the 500 MVA ICT is to be supplied by Hitachi Energy India Limited and to be installed at Ludhiana Sub-station. However, the Petitioner has claimed the capital cost of the 500 MVA ICT of Hitachi make under ACE instead of TBEA make spare ICT shifted from Malerkotla. The Petitioner is directed to clarify the reasons for claiming the ICT cost of Hitachi make under ACE instead of TBEA make at the time of truing-up. The ACE towards ICT is provisionally allowed, and the same will be reviewed at the time of truing-up based on the submissions of the Petitioner. The Petitioner is further directed to submit whether the Commission has granted tariff for Spare ICT at Malerkotla and, if so, the Petitioner is required to submit the details of the same. The Petitioner is also directed to submit the present status of the newly purchased 500 MVA ICT from Hitachi Energy India Limited at the time of truing-up.

31. The projected ACE for the 2022-23 and 2023-24 is allowed under Regulation 24(1)(b) of the 2019 Tariff Regulations on account of works deferred for execution as follows:

(₹ in lakh)

Particulars	**2022-23**	**2023-24**
ACE as per Auditor’s Certificate excluding Initial Spares Discharged as ACE	2031.86	245.87
Additional Initial Spares Discharged	59.00	7.38
ACE allowed in the instant order	**2090.86**	**253.25**

32. The Petitioner has projected ACE of ₹253.25 lakh for the year 2024-25. The COD of the transmission asset is 21.5.2022, and the cut-off date of the transmission project is 21.5.2025. The projected ACE for the year 2024-25 shall be dealt with as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, at the time of truing-up of the tariff of the 2019-24 tariff period and determination

of tariff of the 2024-29 tariff period.

33. The capital cost of the transmission asset considered is as follows:

(₹ in lakh)

Capital cost as on COD	Projected ACE		Capital cost as on 31.3.2024
	2022-23	2023-24	
35.42	2090.86	253.25	2379.53

De-capitalisation of the replaced 315 MVA ICT at Ludhiana Sub-station

34. The Petitioner has submitted that the replaced 315 MVA ICT at Ludhiana Sub-station was originally covered under the "Northern Region System Strengthening Scheme-III (NRSS-III)" Project, and it was capitalized on 1.7.2008 under the NRSS-III project. The Petitioner has submitted that the Commission, vide order dated 20.5.2021 in Petition No. 14/TT/2020 trued-up the tariff of the 2014-19 tariff period and approved the tariff of the 2019-24 tariff period. The Petitioner has submitted that as per the Regional Power Committee (RPC) approval, 315 MVA ICT spared from Ludhiana Sub-station after replacement with 500 MVA ICT is shifted to Bhinmal based on the residual life assessment or refurbishment. The Petitioner has further submitted that as per Regulation 19(5)(b) of the 2019 Tariff Regulations, de-capitalization of 315 MVA ICT spared from Ludhiana Sub-station shall be done after its redeployment at Bhinmal Sub-station at the time of filing the true up petition.

35. We have considered the submissions of the Petitioner. Regulation 19(5)(b) of the 2019 Tariff Regulations provides as follows:

> *"De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*
>
> *Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be decapitalised only after its redeployment;*
> *Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets."*

36. As per Regulation 19(5) of the 2019 Tariff Regulations, if the replacement of a

transmission asset is recommended by RPC, the transmission asset shall be de-capitalized after its deployment. Accordingly, the 315 MVA ICT spared from Ludhiana Sub-station will be decapitalized from NRSS-III on the redeployment of the same at Bhinmal Sub-station. The Petitioner is directed to submit the details of the withdrawal of the ICT from Ludhiana and redeployment of the same in Bhinmal Sub-station at the time of filing of the truing up petition.

Debt-Equity ratio

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

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

Provided that:

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

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

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

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

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

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

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

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

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

38. The Petitioner has claimed the debt-equity ratio of 70:30 in respect of the transmission asset, and the same has been considered in accordance with Regulation 18(1) of the 2019 Tariff Regulations. The details of debt-equity as on COD and 31.3.2024 is as follows:

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	24.79	70.00	1640.88	70.00	1665.67	70.00
Equity	10.63	30.00	703.23	30.00	713.86	30.00
Total	**35.42**	**100.00**	**2344.11**	**100.00**	**2379.53**	**100.00**

Depreciation

39. 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 assets of the generating station and transmission system:*

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

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

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

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

(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."

40. The depreciation has been worked out considering the admitted capital expenditure as on COD. The Weighted Average Rate of Depreciation (WAROD) has been worked out as per the rates of depreciation specified in the 2019 Tariff Regulations and placed in the Annexure. Depreciation allowed in respect of the transmission asset for the period from its COD to 31.3.2024 is as follows:

(₹ in lakh)

	Particulars	**2022-23 (pro-rata for 315 days)**	**2023-24**
	Depreciation		
A	Opening Gross Block	35.42	2126.28
B	ACE	2090.86	253.25
C	Closing Gross Block (A+B)	2126.28	2379.53
D	Average Gross Block (A+C)/2	1080.85	2252.91
E	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28
F	Balance useful life of the asset (at the beginning of the Year)	25	25
G	Elapsed life at the beginning of the year (Year)	-	1
H	Aggregate Depreciable Value	972.77	2027.61
I	**Depreciation during the year**	**49.25**	**118.95**
J	Aggregate Cumulative Depreciation	49.25	168.20
K	Remaining Aggregate Depreciable Value	923.52	1859.42

Interest on Loan (IoL)

41. 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 assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

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

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

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

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

(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.”

42. The Weighted Average Rate of Interest on Loan (WAROI) has been considered on the basis of the rate prevailing as on COD. The Petitioner has prayed that the change in interest rate due to the floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. The floating rate of interest, if any, will be considered at the time of true-up. The IoL allowed for the transmission assets for the period from its COD to 31.3.2024 in accordance with Regulation 32 of the 2019 Tariff Regulations is as

follows:

(₹ in lakh)

	Particulars	**2022-23 (pro-rata for 315 days)**	**2023-24**
A	Gross Normative Loan	24.79	1488.40
B	Cumulative Repayments up to Previous Year	-	49.25
C	Net Loan-Opening (A-B)	24.79	1439.14
D	Additions due to ACE	1463.60	177.28
E	Repayment during the year	49.25	118.95
F	Net Loan-Closing (C+D-E)	1439.14	1497.47
G	Average Loan (C+F)/2	731.97	1468.31
H	Weighted Average Rate of Interest on Loan (in %)	6.7500	6.7500
I	**Interest on Loan**	**42.64**	**99.11**

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

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

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

shall be reduced by 1.00% for the period for which the deficiency continues;

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

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

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

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

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

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

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

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

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

Illustration-

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

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

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

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

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

(c) Effective Tax Rate for the year 2019-20 = ₹ 240 Crore/₹ 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."

44. The Petitioner has submitted that the MAT rate is applicable to the Petitioner's company. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which will be trued-up with the actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the transmission asset for the period from its COD to 31.3.2024 as follows:

(₹ in lakh)

	Particulars	**2022-23 (pro-rata for 315 days)**	**2023-24**
A	Opening Equity (A)	10.63	637.88
B	Additions (B)	627.26	75.98
C	Closing Equity (C) = (A+B)	637.88	713.86
D	Average Equity (D) = (A+C)/2	324.26	675.87
E	Return on Equity (Base Rate) (in %)	15.500	15.500
F	MAT Rate for the respective year (in %)	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782
H	**Return on Equity**	**52.56**	**126.94**

<u>Operation and Maintenance Expenses ("O&M Expenses")</u>

45. The O&M Expenses claimed by the Petitioner for the transmission asset for the period from its COD to 31.3.2024are as follows:

(₹ in lakh)

Particulars	**2023-23 (pro-rata for 315 days)**	**2023-24**
NR 2 – Ludhiana: 400/ 200 kV, 500 MVA ICT		
Voltage Level (kV)	400	400
MVA Capacity (MVA)	500	500
Number of ICT	1	1

Norms	0.398	0.411
Total O&M Expenses	**171.74**	**205.50**

46. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as follows:

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

Particulars	***2019-20***	***2020-21***	***2021-22***	***2022-23***	***2023-24***
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	*45.01*	*46.60*	*48.23*	*49.93*	*51.68*
400 kV	*32.15*	*33.28*	*34.45*	*35.66*	*36.91*
220 kV	*22.51*	*23.30*	*24.12*	*24.96*	*25.84*
132 kV and below	*16.08*	*16.64*	*17.23*	*17.83*	*18.46*
Norms for Transformers (₹ Lakh per MVA)					
765 kV	*0.491*	*0.508*	*0.526*	*0.545*	*0.564*
400 kV	*0.358*	*0.371*	*0.384*	*0.398*	*0.411*
220 kV	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*
132 kV and below	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	*0.881*	*0.912*	*0.944*	*0.977*	*1.011*
Single Circuit (Bundled conductor with four sub-conductors)	*0.755*	*0.781*	*0.809*	*0.837*	*0.867*
Single Circuit (Twin & Triple Conductor)	*0.503*	*0.521*	*0.539*	*0.558*	*0.578*
Single Circuit (Single Conductor)	*0.252*	*0.26*	*0.27*	*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."

47. The O&M Expenses are allowed for the transmission asset for the period from its COD to 31.3.2024 as per Regulation 35(3)(a) of the 2019 Tariff Regulations and are as follows:

(₹ in lakh)

Particulars	**2023-23 (pro-rata for 315 days)**	**2023-24**
NR 2 – Ludhiana: 400/ 200 kV, 500 MVA ICT		
Voltage Level (kV)	400	400
MVA Capacity (MVA)	500	500
Number of ICT	1	1
Norms	0.398	0.411
Total O&M Expenses	**171.74**	**205.50**

Interest on Working Capital (IWC)

48. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of

the 2019 Tariff Regulations specify as follows:

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

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

(i) Receivables equivalent to 45 days of 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. - *In these regulations, unless the context otherwise requires:-*

*'**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;"*

49. The Petitioner submitted that it computed IWC considering the SBI Base Rate plus 350 basis points as on 1.4.2022. The Petitioner considered the IWC rate to be 10.50%.

50. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) considered is 10.50% (SBI 1-year MCLR applicable as on 1.4.2022 of 7.00% plus 350 basis points) for 2022-23 and 12.00% (SBI 1-year MCLR applicable as on 1.4.2022 of 8.50% plus 350 basis points) for 2023-24.

51. The components of the working capital and interest allowed thereon for the transmission asset are as follows:

(₹ in lakh)

	Particulars	2022-23 (pro-rata for 315 days)	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for 1 month)	16.58	17.13
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	29.85	30.83
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	46.37	69.42
D	**Total Working Capital**	**92.80**	**117.37**
E	Rate of Interest (in %)	10.50	12.00
F	**Interest on Working Capital**	**8.41**	**14.08**

Annual Fixed Charges for the 2019-24 Tariff Period

52. The transmission charges allowed for the transmission asset for the 2019-24 tariff period are as follows:

(₹ in lakh)

	Particulars	2022-23 (pro-rata for 315 days)	2023-24
A	Depreciation	49.25	118.95
B	Interest on Loan	42.64	99.11
C	Return on Equity	52.56	126.94
D	O & M Expenses	8.41	14.08
E	Interest on Working Capital	171.74	205.50
F	**Total**	**324.60**	**564.58**

Filing Fee and the Publication Expenses

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

License Fee & RLDC Fees and Charges

54. The Petitioner has sought reimbursement of the licensee fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period. The Petitioner shall be entitled to reimbursement of the license fee in accordance with

Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period. The Petitioner shall also be entitled to recover RLDC fees and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

Goods and Services Tax

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

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

Security Expenses

57. The Petitioner has submitted that security expenses in respect of 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 as per Regulation 35(3)(c) of the 2019 Tariff Regulations.

58. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses on a 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, 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.

Sharing of Transmission Charges

59. The COD of the transmission asset is approved as 21.5.2022. Accordingly, the billing, collection, and disbursement of transmission charges shall be governed by provisions of the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2020, as provided in terms of Regulation 57 of the 2019 Tariff Regulations.

60. To summarize:

a. AFC allowed for the 2019-24 tariff period is as follows:

(₹ in lakh)

2022-23 (pro-rata for 315 days)	**2023-24**
324.60	564.58

61. The Annexure to this order forms part of the order.

62. This order disposes of Petition No. 275/TT/2023 in terms of the above findings and discussions.

sd/-	**sd/-**
(Arun Goyal)	**(Jishnu Barua)**
Member	**Chairperson**

ANNEXURE

Capex	Admitted Capital Cost as on COD	Projected ACE					Admitted Capital Cost as on 31.3.2024	Depreciation Rate (in %)	Annual Depreciation				
		2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23	2023-24
Building	-	-	-	-	-	-	-	3.34	-	-	-	-	-
Transmission Line	-	-	-	-	-	-	-	5.28	-	-	-	-	-
Substation	35.42	-	-	-	2090.86	253.25	2379.53	5.28	-	-	-	57.07	118.95
PLCC	-	-	-	-	-	-	-	6.33	-	-	-	-	-
IT Equipment	-	-	-	-	-	-	-	15.00	-	-	-	-	-
Total	**35.42**	**-**	**-**	**-**	**2090.86**	**253.25**	**2379.53**		**-**	**-**	**-**	**57.07**	**118.95**
								Average Gross Block	**-**	**-**	**-**	**1080.85**	**2252.91**
								WAROD (in %)	**0.00**	**0.00**	**5.17**	**5.28**	**5.28**