

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 86/TT/2024

Coram:

**Shri Jishnu Barua, Chairperson
Shri Ramesh Babu V., Member
Shri Harish Dudani, Member
Shri Ravinder Singh Dhillon, Member**

Date of Order: 29.05.2025

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 the determination of transmission tariff from the COD to 31.3.2024 in respect of asset 132 kV D/C Roing (PG) - Chapakhowa (AEGCL) Transmission Line along with associated line bays at Roing (PG) and Chapakhowa (AEGCL) end under Project – "North Eastern Region Strengthening Scheme-X".

And in the matter of:

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

...Petitioner

Vs.

1. Assam Power Distribution Company Limited,
04th Floor, Bijulee Bhawan, Paltan Bazar,
Guwahati- 781001
2. Meghalaya Energy Corporation Limited,
Short Round Road, "Lumjingshai",
Shillong- 793001, Meghalaya
3. Government of Arunachal Pradesh,
Itanagar, Arunachal Pradesh
4. Power and Electricity Department,
Government of Mizoram, Aizawl, Mizoram
5. Manipur State Power Distribution Corporation Limited,
Keishampat, Imphal



6. Department of Power,
Government of Nagaland, Kohima, Nagaland

7. Tripura State Electricity Corporation Limited,
Vidyut Bhawan, North Banamalipur,
Agartala, Tripura (W)- 799001

.....**Respondents**

For Petitioner : Shri Mohd. Mohsin, PGCIL
Shri Naresh Kumar Angaru, PGCIL
Shri Abhijit Daimari, PGCIL
Shri Ashish Alankar, PGCIL
Ms. Ashita Chauhan, PGCIL

For Respondents : None

ORDER

Power Grid Corporation of India Limited has filed the instant Petition for the determination of transmission tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) from the COD to 31.3.2024 in respect of asset 132 kV D/C Roing (PG) - Chapakhowa (AEGCL) Transmission Line along with associated line bays at Roing (PG) and - Chapakhowa (AEGCL) end (hereinafter referred to as “the transmission asset”) under Project – “North Eastern Region Strengthening Scheme-X”.

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

- “1) Condone the delay in completion of subject assets on merit of the same being out of the control of Petitioner in line with CERC Regulations’2019 22(2) “uncontrollable factors” and approve the tariff as claimed.*
- 2) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.*
- 3) Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para 8.4.*
- 4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to a 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 8.40 above for respective block.*
- 5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on the 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 the petition.*
- 6) *Allow the petitioner to bill and recover Licensee fees and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
 - 7) *Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.*
 - 8) *Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses as mentioned at para 8.9 above.*
 - 9) *Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*
 - 10) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents if GST on transmission is levied at any rate in the future. Further, any taxes including GST and duties including cess, etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*
 - 11) *Allow interim tariff in accordance with Regulation 10(3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for the 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 Petitioner has been entrusted with the implementation of "North Eastern Region Strengthening Scheme-X (NERSS-X)". The Investment Approval (IA) of the project was accorded by the Competent Authority, i.e., CMD of the Petitioner, with an estimated cost of ₹ 4084 lakh, including an IDC of ₹ 143 lakh based on the June 2020 price level and circulated vide Memorandum No. C/CP/PA2021-09-0P-IA007 dated 2.12.2020.
 - b. The Revised Cost Estimate (RCE) of the project was accorded by the Competent Authority i.e. CMD of the Petitioner, vide Memorandum dated 2.11.2023 with an estimated cost of ₹6163 lakh, including an IDC of ₹197 lakh based on May 2023 price level.
 - c. The scope of the work covered under "North Eastern Region Strengthening Scheme-X" (hereinafter referred to as the "transmission project") is as follows:



Substation

a) Extension work at Roing (PGCIL) 132/33 kV Substation

- 02 Nos 132 kV line bays.

b) Extension work at Chapakhowa (AEGCL) 132/33 kV Substation

- 02 Nos 132 kV line bays

Transmission Line

- Roing (PGCIL)-Chapakhowa (AEGCL) 132 kV D/C line

d. The scope of the scheme was discussed and agreed upon in the 1st meeting of NERPC-TP held on 8.11.2019. Further, the same was also approved in the 20th TCC & NERPC meeting held on 12.9.2020.

e. The Petitioner has submitted that as per the IA dated 2.12.2020, the transmission project work was scheduled to be commissioned within 15 months from the date of the IA, i.e., by 2.3.2022, against which the transmission asset was put under commercial operation on 10.7.2023 with a delay of 495 days.

4. The entire scope of the transmission project is completed and is covered under the instant Petition.

5. The Respondents, mainly beneficiaries of the North Eastern Region, are Distribution Licensees, Generation Utility, and Power Departments, which are procuring transmission services from the Petitioner.

6. The Petitioner has served a copy of the Petition on the Respondents, and notice regarding the filing of this Petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 (hereinafter referred to as “the Act”). No comments or suggestions have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. None of the Respondents have filed their reply in the instant Petition.



7. The hearing in the matter was held on 26.12.2024 and 25.2.2025. The order in the matter was reserved on 25.2.2025. This order is being issued considering the submissions made by the Petitioner in the Petition vide affidavits dated 8.12.2023, 7.5.2024, and 9.1.2025.

8. Having heard the Petitioner's representatives and having perused the material on record, we proceed to dispose of the Petition.

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

9. The Petitioner has claimed the following transmission charges in respect of the transmission asset for the 2019-24 tariff period:

(₹ in lakh)	
Particulars	2023-24 (pro-rata for 266 days)
Depreciation	207.71
Interest on Loan	210.66
Return on Equity	221.67
Interest on Working Capital	12.37
O&M Expenses	64.17
Total	716.58

10. The Petitioner has claimed the following Interest on Working Capital (IWC) in respect of the transmission asset for the 2019-24 tariff period:

(₹ in lakh)	
Particulars	2023-24 (pro-rata for 266 days)
O&M Expenses	7.36
Maintenance Spares	13.25
Receivables	121.23
Total Working Capital	141.84
Rate of Interest (in %)	12.00
Interest on Working Capital	17.02
Pro rata Interest on Working Capital	12.37

Date of Commercial Operation (COD)

11. The Petitioner has claimed COD of the transmission asset as 10.7.2023. The Petitioner has submitted a copy of the CEA energization certificate, NERLDC trial operation certificate, self-declaration COD letter, and CMD's certificate in support of the COD of the transmission asset.



12. We have considered the Petitioner's submissions. Taking into consideration the CEA energization certificate dated 28.6.2023, NERLDC charging certificate dated 2.8.2023 certifying the completion of the trial run on 9.7.2023, self-declared COD letter dated 10.8.2023, and CMD certificate, the COD of the transmission asset is approved as 10.7.2023.

Capital Cost

13. 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."

14. The Petitioner has claimed the following capital cost incurred as on COD and has projected Additional Capital Expenditure (ACE) to be incurred in respect of the transmission asset. The Petitioner has also submitted an Auditor's Certificate in support of the same.



FR Approved Cost	RCE Approved cost	Expenditure Up to COD	Projected Expenditure			(₹ in lakh)
			2023-24	2024-25	2025-26	Estimated Completion Cost
4084.17	6163.42	5331.83	181.55	136.16	136.16	5785.70

Cost Overrun

15. The Petitioner has submitted that since, against the FR apportioned approved cost of ₹4084.17 lakh, the estimated completion cost of the transmission asset is ₹5785.70 lakh, there is a cost overrun in respect of the transmission asset vis-à-vis FR. However, the completion cost of the transmission asset is within the Revised Cost Estimate (RCE) and, as such, there is no cost overrun. The Petitioner has submitted the cost variation details between the FR approved cost and the estimated completion cost of the transmission asset, which are as follows:

(₹ in lakh)		
FR Approved Cost (a)	Estimated completion Cost (b)	Cost Variation (c=b-a)
4084.17	5785.70	1701.53

16. Further, the Petitioner has submitted the main reasons for the cost variation, which are as follows:

i. Compensation towards Crop, Tree, PTCC, Hutment & Forest (₹728 lakh):

17. The Petitioner has submitted that compensation was paid as per the actual/in line with the Guidelines issued by the MoP/ respective State Government and as decided by competent authorities.

(₹ in lakh)			
Description	As per DPR	As per RCE	Remarks
i) Compensation towards Crop, Tree, PTCC, Hutment, etc.	155	855	Crop and tree compensation of ₹136 lakh in DPR was approved @ ₹5 lakh/km on a normative basis, which now in RCE works out to ₹855 lakh.
	-	44	There has been an additional expenditure due to the inclusion of the cost against the felling of trees and the clearing of the jungle



Description	As per DPR	As per RCE	Remarks
			for the erection and stringing works, amounting to ₹44 lakh, which was not envisaged in the DPR.
ii) Compensation towards the Forest	357	459	Based on actual payment for 15.709 Ha of forest area encountered in Arunachal Pradesh and Assam. There has been a decrease in the forest area from 27 Ha envisaged as per DPR to 15.709 Ha as per the actual forest area encountered in Arunachal Pradesh and Assam. However, the rate for NPV has increased from ₹10.43 lakh per Ha as considered in DPR to 15.96 lakh per Ha as per the demand note of Principal CCF (A & V) & Nodal Officer (FCA), Arunachal Pradesh, and DFO, Assam. Similarly, the rate for Compensatory Afforestation has also substantially increased from ₹1.40 lakh per Ha as considered in the DPR to ₹5.56 lakh per Ha as per the demand notes.
iii) Compensation towards Tower Base and diminution of land value in the width of the Right of Way (RoW) Corridor	431	313	As per actual/anticipated amounts paid/ to be paid.
TOTAL	943	1671	

ii. Cost variation in the Equipment Cost, including civil works (₹390 lakh):

18. The Petitioner submitted that through an open competitive bidding process, the lowest possible market prices for required products/services/as per detailed design, are obtained and contracts are awarded based on the lowest evaluated eligible bidder on an overall basis. The best competitive bid prices for tenders may differ from the cost estimate, depending on prevailing market conditions, design, and site requirements. Estimates are prepared by the Petitioner according to well-defined procedures for cost estimation. The FR cost estimate is a broad, indicative cost generally calculated based on average unit rates of recently awarded contracts as a standard practice. It is submitted that the cost estimate of the project is based on the September 2020 price level. Further, regarding variation in the cost of individual items



in transmission line and substation packages, it is submitted that the packages under the subject scope of works comprise a large number of items, and the same are awarded through open competitive bidding. In the said bidding process, the bids are received from multiple parties quoting different rates for various BOQ items under the said package. Further, the lowest bidder can be arrived at/ evaluated on an overall basis only. Hence, item-wise unit prices in contracts and their variation over unit rate considered in FR estimates are beyond the control of the Petitioner.

iii. Variation in IDC (₹54 lakh):

19. The Petitioner has submitted that the variation in IDC with respect to FR is attributable to an increase in overall capital cost with respect to FR, due to variation in the rate of interest considered in FR as against actuals, and deployment of funds based on actuals. It may be mentioned that in the FR, the IDC was calculated considering the rate of interest for domestic loans @10.5%. However, in actuality, the weighted average rate of interest of deployed loans is considered. As a matter of fact, the actual IDC accrued up to COD has been considered at the time of the claim of the tariff.

iv. Variation in IEDC (₹513 lakh):

20. The Petitioner has submitted that in the Investment Approval, IEDC and Contingency of 10.75% and 3% respectively have been considered, whereas based on the actual expenditure under the subject head, the IEDC has been considered in the Auditor's Certificate. Here, it may be mentioned that the Project Time Cycle (PTC) increased from 15 months, considered in FR, to 31 months as per actual commissioning. Further, the claimed IEDC is within the IEDC considered in the RCE.

21. Further, the Petitioner, vide affidavit dated 9.1.2025, has submitted the following information in response to the Commission's queries raised, vide RoP dated 31.12.2024:



- i) In relation to the Commission's query that, according to the DPR, the compensation for crops, trees, PTCC, huts, etc., was ₹155 lakh, while according to the RCE, it is ₹855 lakh. The Petitioner has clarified that the DPR was prepared in September 2020, considering the right-of-way requirements as well as expenditure towards tree and crop compensation as per the Petitioner's guidelines, i.e., 12.62 meters for the 132 kV transmission line. However, during the period of actual execution, the Government of Arunachal Pradesh vide Notification dated 5.3.2021 stipulated the revised ROW requirements from 12.62 meters to 27 meters. Further, vide Notification made through Circular No. LMD-13011(13)/5/2021, dated 6.9.2022, the tree and crop compensation were revised, which was to be paid based on the actual tree enumeration. Hence, compensation has been increased due to the enhancement of the right-of-way requirement from 12.62 meters to 27 meters and in accordance with the revised guidelines of the Government of Arunachal Pradesh.
- ii) With regard to another query of the Commission that as per Form-5 for the transmission line, the estimated cost towards insulators was ₹27.12 lakh, hardware fittings were ₹38.64 lakh, civil works including foundation were ₹338.16 lakh, whereas, the actual cost has been claimed as ₹83.83 lakh, ₹196 lakh and ₹515.65 lakh respectively. The Petitioner has clarified that the procurement of various goods and services for the transmission project was made through an open competitive bidding process, which ensures the lowest possible market prices for the required products/services/as per the detailed design. The contracts were awarded on the basis of the lowest evaluated eligible bidder on an overall basis. The best competitive bid prices against tenders may vary as compared to the cost estimate, depending on prevailing market conditions, design, and site requirements. The



Petitioner has submitted that the estimates are prepared by it as per well-defined procedures. The FR cost estimate is a broad, indicative cost worked out generally on the basis of average unit rates of recently awarded contracts as a general practice. Further, the cost estimate of the project is on the basis of September 2020 price level. Regarding variation in the cost of individual items in transmission line, it is submitted that the packages under the subject scope of works comprise a large no. 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. Hence, item-wise unit prices in contracts and their variation over unit rate considered in the FR estimates are beyond the Petitioner's control. In addition to the above, as per the instructions of MOEF and Defence Aviation, bird diverters and aviation markers were installed on the towers, which were not envisaged at the time of preparation of the DPR. This resulted in an increase in hardware costs amounting to ₹60.12 lakh. Further, at the time of the final survey, the number of angle towers increased from 57 to 67, leading to an increase in the actual costs for hardware fittings, insulators, and civil works, including foundations.

22. We have considered the Petitioner's submissions. It is observed that the estimated completion cost of the transmission asset is higher than the FR cost. As per the Petitioner's submission, it is mainly due to the increase in compensation for trees, crops, hutments, and forest, the increase in the award cost of equipment, and the increase in IDC and IEDC. The Petitioner has also submitted the justification that the compensation towards trees and crops was increased due to revision in ROW requirements from 12.62 meters to 27 meters vide Notification dated 5.3.2021 and revision in compensation vide Circular No. LMD-13011(13)/5/2021, dated 6.9.2022 by the Government of Arunachal Pradesh. However, the



Petitioner has not provided a copy of the Notifications dated 5.3.2021 & 6.9.2022 in this Petition.

23. Therefore, as compared with the RCE cost of ₹6163.42 lakh for the transmission asset, the estimated completion cost is ₹5785.70 lakh, which is within the approved RCE cost, and therefore, there is no cost overrun. Further, the Petitioner is directed to submit a copy of the Notification dated 5.3.2021 and 6.9.2022 issued by the Government of Arunachal Pradesh regarding revision of guidelines and compensation payment details at the time of truing up to review the same at that point in time.

Time overrun

24. As per the IA dated 2.12.2020, the transmission asset was scheduled to be commissioned within 15 months, i.e., 28.2.2022, against which it was put into commercial operation on 10.7.2023 with a delay of 497 days. The time overrun in respect of the transmission asset is as follows:

Asset's Name	SCOD	COD	Time Overrun
132 kV D/C Roing (PG) - Chapakhowa (AEGCL) Transmission Line along with associated line bays at Roing (PG) and - Chapakhowa (AEGCL) end	28.2.2022	10.7.2023	497 days

Delay Reasons for Commissioning of the Transmission Asset:

A. Delay due to Worldwide COVID-19 Pandemic (3 months):

25. The Petitioner has submitted that the Coronavirus situation posed the greatest potential harm due to unforeseen or unplanned interruptions or delays. The effects of the Coronavirus were not linear, as associated developments were evolving rapidly. According to the Petitioner, it faced a multitude of challenges as the effects navigated largely uncharted territory, with the projects experiencing highly unique and mounting risks due to COVID-19. The lockdown restricted people from leaving their homes. All transport services—road, air,



and rail—were suspended, except for the transportation of essential goods, fire, police, and emergency services. Educational institutions, industrial establishments, and hospitality services were also suspended. Services such as food shops, banks, ATMs, petrol pumps, and other essentials, along with their manufacturing, were exempted. The Home Ministry stated that anyone who fails to follow the restrictions could face up to a year in jail. The Government had locked down all cities and restricted movement from one place to another. These movement restrictions affected the supply chain, led to transportation shortages, and caused worker absenteeism due to illness, quarantine, and labour migration shortages, resulting in decreased output and delays in all ongoing projects nationwide. The lockdown, which required a voluntary step back from construction workers, was unavoidable and further complicated matters. Access to sites was restricted as a result of measures to contain the COVID-19 outbreak. Further, the contractor was unable to carry out the work due to Government actions aimed at preventing the spread of the outbreak. Specific COVID-19-related challenges included supplier delivery issues, worker absenteeism due to illness, delayed issuance of permits, travel restrictions, and lost time or inefficiencies due to the necessity of practicing social distancing on the job site, all of which had significant cost and schedule consequences. Additionally, a lack of engineering and technical support and supply chain disruptions emerged as major factors impacting project schedules and implementation. Thus, the commissioning of power projects faced delays due to squeezed supply lines and halted construction activities. Moreover, re-mobilisation of various work gangs from other States also took additional time, as the crews were reluctant to travel due to restrictions, including mandatory institutional quarantine. Meanwhile, valuable working time was lost due to the lockdown, and the onset of the peak monsoon season resulted in sites being waterlogged and inaccessible. Hence, the desired progress was not achieved. The Ministry of Power vide a letter dated 12.6.2021, allowed an extension of the Scheduled Commercial



Operation Date (SCOD) by three months for all interstate projects with SCODs coming after 1.4.2021.

B. Delay due to Forest Clearance (724 days):

26. The Petitioner has submitted that a total delay of 724 days (from 22.2.2021 to 16.2.2023) occurred due to the non-availability of forest approval of the transmission asset. This has caused considerable delay in the commissioning of the transmission asset.

Non-availability of Forest Clearance at Roing Portion under Lower Dibang Valley District (Arunachal Pradesh):

The chronology of various events during forest approval is as follows:

Date	Remarks
7.9.2020	Letter from POWERGRID to DFO (Territorial), Roing for carrying out a detailed survey of 132 kV D/C Roing-Chapakhowa TL.
22.2.2021	Letter from POWERGRID to DFO (Territorial), Roing, for joint inspection of forest land with forest officials for verification/demarcation of forest areas for the subject line.
10.6.2021	A letter was issued from the DFO, Roing, for the joint verification/demarcation of forest areas.
17.7.2021	The Forest Clearance proposal was uploaded on the Parivesh portal, having proposal no. FP/AR/TRANS/144909/2021.
13.8.2021	Forest proposal forwarded from the Nodal officer to the DFO, Lower Dibang.
1.4.2022	After verification and site inspection, the proposal was forwarded from DFO to CF, Tezu. The proposal was reviewed & recommended by CF, Jorhat and forwarded to the Nodal Officer, after verification and recommended by the Nodal Officer, the proposal was forwarded to the State Government. Further, the proposal was forwarded to the regional office of the MOEFCC, Guwahati by the State Government.
9.5.2022	Stage-I forest clearance received.
10.6.2022	Working permission granted for Arunachal Pradesh portion.
11.7.2022	Stage -II forest clearance received.



Non- availability of Forest Clearance at Chapakhowa portion under Tinsukia District (Assam):

The chronology of various events during forest approval:

Date	Remarks
1.3.2021	Letter from POWERGRID to DFO (Sadiya), Tinsukia, for joint inspection of forest land with forest officials for verification/demarcation of forest areas for the subject line.
20.8.2021	The Forest Clearance proposal was uploaded on the Parivesh portal, having proposal no FP/AS/TRANS/145939/2021.
26.8.2021/ 30.8.2021	Query raised by RFO (Sadiya), Doomdooma Forest Division on 26.8.2021 which was replied on 30.08.2021 and requested for forwarding the proposal to DFO, Doomdooma Forest Division.
3.12.2021	Clarifications were sought by DFO, Doomdooma forest division, which were replied to on the same date.
21.12.2021	Letter from the Chief Conservator of Forest and Nodal officer, Assam to the DFO, Doomdooma for conducting a Joint verification survey.
31.12.2021	After the joint verification survey, the report was submitted by the Range Forest Officer, Chapakhowa to DFO Doomdooma.
4.3.2022	After verification and site inspection, the proposal was forwarded from DFO to CF, Jorhat.
30.4.2022	The proposal was reviewed and recommended by CF, Jorhat and forwarded to the Nodal Officer.
3.6.2022	After verification and recommended by the Nodal officer, the proposal was forwarded to the State Government.
8.6.2022	The proposal was forwarded to the Regional Office of MOEFCC, Guwahati by the State Government.
2.12.2022	Stage-I forest clearance received.
16.2.2023	Working permission granted for Assam portion.

C. ROW issues :

27. The Petitioner has submitted that it faced severe right-of-way issues in the foundation and stringing of the 132 kV D/C Roing (PG)- Chapakhowa (AEGCL) Transmission Line, along with the associated line bays at Roing (PG) and Chapakhowa (AEGCL) ends. The location-wise chronological details of ROW issues are as follows:



Date	Remarks
29.7.2021	Letter from POWERGRID to SDO (Civil), Chapakhowa, requesting the State administration to execute the subject transmission line.
24.9.2021	Letter from POWERGRID to the Chief Secretary, Government of Arunachal Pradesh, Itanagar, requesting the State administration to execute the subject transmission line.
18.12.2021	Letter from POWERGRID to the Revenue Circle Officer, Chapakhowa, regarding the resolution of Right of Way issues at location no. 1D/2.
27.1.2022	Order from the DC office (Roing) for intimation regarding the Board of Officers to assess the damage compensation.
31.1.2022	Circular from the SDO office to assemble the Board members of the compensation committee.
11.2.2022	Letter from SDO (Dibang Valley) to appeal for localized limited diversion.
4.4.2022	Letter from villagers to the Deputy Commissioner (Roing), Lower Dibang Valley, regarding a complaint against POWERGRID for constructing a tower in their area without consent or proper information.
20.4.2022	Letter from POWERGRID to the Deputy Commissioner, District Forest Officers, District Horticulture Officer, and District Agriculture Officer (Roing) requesting rates of compensation.
16.6.2022	Letter from POWERGRID to Deputy Commissioner (Roing), notifying about the shifting of a line section, approximately 8 km from Roing to Shantipur of the mentioned TL.
1.8.2022	Letter from POWERGRID to DFO (Roing) regarding the resolution of the tower foundation issue in the forest area.
26.9.2022	Order from the Deputy Commissioner's office to assemble all compensation assessment board members at the SDO office in Parbuk by 30.11.2022 for locations 16/0 to 23/0.
9.3.2023	Letter from POWERGRID to the Deputy Commissioner (Roing) regarding the resolution of issues in the remaining portion of the subject TL.
29.5.2023	Letter from POWERGRID to the Deputy Commissioner (Roing) regarding the resolution of the RoW issue in loc 25/0 to 27/0.
30.5.2023	Order from the Government of Arunachal Pradesh, Office of the Superintendent of Police, Lower Dibang Valley, for police protection during the construction of the specified transmission line.

28. The Petitioner has submitted that a total of 730 days (from 29.7.2021 to 29.5.2023) have occurred since the first encounter with ROW issues of the transmission asset. This caused a considerable delay in the commissioning of the transmission asset. It was further



submitted that despite the unforeseen bottlenecks, the transmission asset could be commissioned with comparatively less delay due to the Petitioner's painstaking efforts. The Petitioner has prayed for condonation of delay in the commissioning of the transmission asset on merits, as this delay is out of the Petitioner's control and is covered under Regulation 22(2) of the 2019 Tariff Regulations as 'uncontrollable factors'. Regulation 22 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 project:

- (1) The "controllable factors" shall include but shall not be limited to the following:*
 - a. Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies or change in law or force majeure events; and*
 - b. Delay in execution of the project on account of contractor or supplier or agency of the generating company or transmission licensee.*
- (2) The "uncontrollable factors" shall include but shall not be limited to the following:*
 - a. Force Majeure events;*
 - b. Change in law; and*
 - c. Land acquisition except where the delay is attributable to the generating company or the transmission licensee."*

29. With regard to the delay beyond 29.5.2023 till the COD of the transmission asset, the Petitioner, vide affidavit dated 9.1.2025, has furnished a letter dated 29.5.2023, which was written by the Petitioner to the Deputy Commissioner (Roing) to resolve the ROW issue between locations 25/0 and 27/0. Based on the Petitioner's request, the order was issued by the SP (Lower Dibang Valley) on 30.5.2023, providing police protection during construction between locations 25/0 and 27/0. With the assistance of police protection, the construction of the said stretch was completed on 15.6.2023. Upon completion of the construction work, a proposal for idle charging was submitted on 16.6.2023 for checking the phase sequence and conducting other tests to synchronize the line. After completing the pre-commissioning tests, the first-time charging of the said line was done on 4.7.2023. Subsequently, the Trial Operation Certificate was issued by NERLDC on 8.7.2023, and COD was declared effective from 10.7.2023.



Analysis and Decision

30. On perusal of the record, we find that as per the IA dated 2.12.2020, the transmission asset, was scheduled to be commissioned within 15 months from the date of the IA, i.e., by 28.2.2022 against which the transmission asset was put into commercial operation on 10.7.2023 with a delay of 497 days as per the following details:

SCOD	COD	Time overrun
28.2.2022	10.7.2023	497 days

31. We have considered the Petitioner's submissions and have also perused the documents placed on record regarding the transmission asset. We note that the petitioner has claimed the delay of 497 days on account of the Covid-19 pandemic, Forest Clearance, and ROW issues. The detailed justification of time overrun submitted by the petitioner is analysed as follows:

A. Delay due to the worldwide COVID-19 Pandemic

32. The Petitioner has submitted that the lockdown restricted people from stepping out of their homes. All transport services—road, air, and rail—were suspended, with exceptions for the transportation of essential goods, fire, police, and emergency services. The Government had locked down all cities and restricted movement from one place to another. The movement restrictions affected the supply chain, caused transportation shortages, and led to worker absenteeism due to illness, quarantine, or migrant labour shortages, which resulted in a decrease in output and delayed all nationwide ongoing projects. The site was closed or access was restricted as a result of measures to contain the COVID-19 outbreak. The contractor was unable to carry out the works due to the actions of the Government to prevent the spread of the outbreak. Specific COVID-19-related challenges included supplier delivery issues, worker absenteeism due to illness, delayed issuance of permits, travel restrictions, and lost time or inefficiencies due to the need to practice social distancing on the job site, all



of which could have significant cost and schedule consequences. Additionally, the lack of engineering and technical support and supply chain disruptions were major factors impacting project schedules and implementations. Thus, the commissioning of power projects faced delays due to the squeezing of supply lines and construction activities. Consequently, the desired progress was not achieved.

33. The Petitioner has also relied on the MoP letter dated 12.6.2021, which allowed an extension of the Scheduled Commercial Operation Date (SCOD) by 3 months to all inter-state projects with SCOD coming after 1.4.2021.

34. We have considered the Petitioner's submissions. The Ministry of Power, vide letter dated 12.6.2021, allowed an extension of the SCOD by 3 months to all inter-state projects with SCOD coming after 1.4.2021. The relevant extracts of the MoP letter dated 12.6.2021 are as follows:

"Sub: Extension to TSP/Transmission Licensees for completion of under construction interstate transmission projects – reg.

Sir,

I am directed to state that transmission utilities have approached this Ministry stating that construction activity at various transmission projects sites have been severely affected by the current second wave of COVID-19 pandemic and various measures taken by State/UT Governments to contain the pandemic; such as night curfew, imposition of section 144, weekend lockdown and complete lockdown. In this regard they have requested for extension of Scheduled Commercial Operation Date (SCOD) for the undergoing Transmission projects to mitigate the issues of disruption in supply chains and manpower, caused due to COVID-19 pandemic.

2. The matter has been examined in the Ministry and it has been noted that unlike last year complete lock-down in the entire country, this time different States/UTs have ordered lock-down in their State/UTs as per their own assessments. Therefore, after due consideration, it has been decided that;

i. All inter-state transmission projects, which are under construction with SCOD coming after 01 April 2021 shall get an extension of three (3) months in respect of their SCOD;

ii. The commencement date of Long Term Access (LTA) to a generator by CTU based on completion of a transmission line, whose SCOD is extended by three (3) months due to COVID19 as mentioned above at point(i), shall also be extended by three (3) months.

3. This issue with the approval of the Competent Authority."



35. As per the MoP letter dated 12.6.2021, the extension of 3 months in SCOD is applicable for under-construction projects with SCOD after 1.4.2021. In the instant case, the work is in progress, and the SCOD of the transmission asset is 28.2.2022; thus the extension of 3 months in respect of SCOD as per the MoP letter dated 12.6.2021 is applicable for the transmission asset.

36. In light of the above discussions, the extension of 3 months in SCOD of the transmission asset is hereby allowed. The details of the revised SCOD, COD, and time overrun are as follows:

SCOD as per IA dated 1.12.2020	Revised SCOD as per MoP letter dated 12.6.2021	COD	Time overrun with respect to the revised SCOD
28.2.2022	31.5.2022	10.7.2023	405 days

B. Delay due to Forest Clearance

37. The Petitioner has claimed a delay of 724 days, i.e., from 22.2.2021 to 16.2.2023, on account of the non-availability of Forest Clearance at Roing portion under Lower Dibang Valley District (Arunachal Pradesh) and non-availability of Forest Clearance at Chapakhowa portion under Tinsukia District (Assam).

B.1 Non-availability of Forest Clearance at Roing portion under Lower Dibang Valley District (Arunachal Pradesh)

38. The Petitioner has claimed that the delay was due to the non-availability of Forest Clearance for the Roing portion under Lower Dibang Valley District (Arunachal Pradesh) and has submitted a chronology of various events that occurred during the forest clearance process. Furthermore, the Petitioner, vide an affidavit dated 7.5.2024, has also submitted details of the locations where the progress of foundation, erection, and stringing works was affected due to the delay in forest clearance, the details of which are as follows:



Sl. No	Section of Line (Section Tower to Section tower)	Name of Reserve Forest (RF)	Total Nos of Towers to be Erected.	Total Line Length in Reserve Forest (in Mtrs)	Works affected in Locations
1	AP 12/1	Deopani RF	1 No	233.70	12/1
2	32/4 to AP 33/0	Anchal Reserve Forest (Meka)	2 No	428.52	32/4 & 33/0
3	AP 35/0 to 41/0	Deopani RF	17 Nos	4905.92	AP-35/0, 35/1, 35/2, 35/3, 35/4, 35/5, AP-36/0, 37/0, 37/1, 37/2, 37/4, AP-38/0, 38/1, AP-39/0, AP-40/0, AP-41/0
		Total	20 Nos.	5568.14	

39. We have considered the Petitioner's submissions. On perusal of the documents, it is observed that the Petitioner effectively took up the matter with the concerned authorities of the forest department vide letters dated 7.9.2020 and 22.2.2021 and uploaded the proposal on the concerned portal of the forest department on 17.7.2021. After completing the different stages of the process, Stage-I Forest Clearance was accorded on 9.5.2022, and subsequently, the working permission was accorded by the concerned department of the Government of Arunachal Pradesh, vide letter dated 10.6.2022. The Stage-II forest clearance was accorded on 11.7.2022.

40. As the working permission was granted by the concerned department of the Government of Arunachal Pradesh to the Petitioner on 10.6.2022; we are of the view that the delay up to 10.6.2022 on account of Forest Clearance at Roing portion under Lower Dibang Valley District (Arunachal Pradesh) was beyond the Petitioner's control.

B.2 Non- Non-availability of Forest Clearance at Chapakhowa portion under Tinsukia District (Assam)

41. The Petitioner has claimed the delay on account of the non-availability of Forest Clearance at Chapakhowa portion under Tinsukia District (Assam) and submitted the chronology of various events that occurred during forest clearance. Further, the Petitioner

vide affidavit dated 7.5.2024 has submitted the following details of locations where the progress of foundation, erection and stringing works was affected due to delay on account of forest clearance:

Sl. No	Section of Line (Section Tower to Section tower)	Name of Reserve Forest (RF)	Total Nos of Towers to be Erected.	Total Line Length in Reserve Forest (in Mtrs)	Works affected in Locations
1	Ext Tower no. 7/2 to 9/0 and location no. AP 11/0 to 12/0 in the state of Assam	Sadiya Station RF	2 Nos	692 mtrs	AP 8/0, SPAN-7/2 to AP-8/0 AP 8/0-AP 9/0 AP-11/0-AP12/0
		Total	2 Nos.	692 Mtrs	

42. We have considered the Petitioner's submission. On perusal of the documents placed on record, it is observed that the Petitioner had uploaded the proposal on the concerned portal of the forest department on 20.8.2021 and took up the matter effectively with the concerned authorities of the forest department vide letters dated 30.8.2021 and 3.12.2021. After completing the process at various stages of approval, Stage-I Forest Clearance was accorded on 2.12.2023, and subsequently, the site was officially handed over after completion of demarcation of forest land by the concerned Forest Department of the Government of Assam vide letter dated 16.2.2023.

43. As the site was officially handed over to the Petitioner for further construction activities by the concerned forest department of Govt. of Arunachal Pradesh on 16.2.2023, we are of view that the delay up to 16.2.2023 on account of Forest Clearance at Chapakhowa portion under Tinsukia District (Assam) was beyond the Petitioner's control.

44. In view of the above, we are inclined to consider that the delay up to 16.2.2023 due to the non-availability of Forest Clearance at the Roing portion under Lower Dibang Valley District (Arunachal Pradesh) and the non-availability of Forest Clearance at the Chapakhowa portion under Tinsukia District (Assam), as claimed, was beyond the Petitioner's control.



Hence, the delay of 262 days from the revised SCOD, i.e., 31.5.2022, to 16.2.2023, due to the delay in Forest Clearance under Lower Dibang Valley District (Arunachal Pradesh) and Tinsukia District (Assam) is hereby condoned.

C. Delay due to RoW issues

45. The Petitioner has claimed a delay of 730 days from 29.7.2021 to 29.5.2023 on account of various ROW issues encountered by the Petitioner during the construction of the transmission line. Further, the Petitioner, vide affidavit dated 7.5.2024, has also submitted that the tower foundation, erection, and stringing work were hampered due to various RoW issues. The Petitioner has also submitted the location-wise details of various RoW issues which are summarized as follows:

Sl. No	Particulars	Works affected in Locations	Period of RoW issues
1	RoW issues faced in Chapakhowa under Tinsukia District	1D/2	10.12.2021 to 8.2.2023
2	RoW issues faced in Roing under Lower Dibang Valley District	16/0 to 23/0, 26/0 to 28/0, 30/0, 31/0, 31/1 & 32/3 and 41/0 to 44/0	11.2.2022 To 9.3.2023
3	RoW issues faced in Reserved Forest Areas	26/0 to 27/0	27.5.2023 to 13.6.2023

46. We have considered the Petitioner's submission. Having perused the documents on record, we are of the view that the Petitioner faced various RoW issues in Arunachal Pradesh and Assam at different locations under Tinsukia and Lower Dibang Valley districts. The Petitioner took up the matter effectively with the concerned administrative, police, and forest authorities through letters dated 18.12.2021, 20.4.2022, 16.6.2022, 1.8.2022, 9.3.2023, and 29.5.2023 to intervene in the RoW issues and resolve the same for early completion of work. In response, the concerned authorities also took appropriate steps vide letters dated 27.1.2022, 31.1.2022, 11.2.2022, 26.9.2022, and 30.5.2023.



47. In light of the above discussions and the documents on record, we are of the view that the delay up to 30.5.2023 due to various RoW issues encountered by the Petitioner during the construction of the transmission line was beyond the Petitioner's control. As the time overrun due to the delay in Forest Clearance from revised SCOD, i.e., 31.5.2022 to 16.2.2023, has already been condoned above in this order, the delay of 102 days from 17.2.2023 to 29.5.2023 on account of the delay occurred due to various RoW issues is hereby condoned.

48. The Petitioner, vide affidavit dated 9.1.2025, has submitted that with the assistance of police protection, the construction of the transmission line between locations 25/0 and 27/0 was completed on 15.6.2023. Upon completion of the construction work, a proposal for idle charging was submitted on 16.6.2023, to check the phase sequence and conduct other tests to synchronize the line. After completing the pre-commissioning tests, the first-time charging of the said line was done on 4.7.2023. Subsequently, the Trial Operation Certificate was issued by NERLDC on 8.7.2023, and the COD was declared effective from 10.7.2023.

49. We have considered the Petitioner's submissions and taking into consideration the completion of erection work on 16.6.2023 and subsequent pre-commissioning activities and first time charging on 4.7.2023, the delay of 41 days from 30.5.2023 to 9.7.2023 is hereby condoned.

50. The summary of SCOD, COD, time overrun claimed, and time overrun condoned/not condoned in respect of the transmission asset is as follows:

SCOD as per IA dated 1.12.2020	Revised SCOD as per MoP letter dated 12.6.2021	COD	Time overrun with respect to the revised SCOD	Time overrun Condoned	Time overrun not Condoned
28.2.2022	31.5.2022	10.7.2023	405 days	405 days	NIL



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

51. The Petitioner has claimed the IDC in respect of the transmission asset and has submitted the statement showing the computation of IDC, discharge of IDC liability as on COD, and thereafter as under:

(₹ in lakh)		
IDC as per the Auditor's Certificate	IDC Discharge up to the COD	IDC discharged during the period 2023-24
150.87	131.65	19.22

52. We have considered the Petitioner's submissions. As discussed above in this order, the time overrun in commissioning the transmission asset has been condoned. Accordingly, the IDC on a cash basis up to the COD has been worked out based on the loan details given in the statement showing the discharge of IDC and Form-9C for the transmission asset. The IDC claimed and considered as on the COD, and the summary of the discharge of IDC liability up to the COD and, thereafter, for the purpose of tariff determination, subject to its revision at the time of truing up, is as follows:

(₹ in lakh)					
IDC as per the Auditor's Certificate (A)	IDC disallowed (B)	IDC Allowed (C)=(A)-(B)	Undischarged IDC (D)	IDC allowed as on COD (E)=(C) – (D)	IDC discharged in 2023-24 (F)
150.87	0	150.87	19.22	131.65	19.22

53. The undischarged IDC has been considered as ACE during the year in which it was discharged.

54. Further, the Petitioner has submitted that the entire amount of IEDC for the transmission asset has been discharged up to the COD. As the time overrun for the transmission asset has been condoned, the IEDC has been allowed as claimed by the Petitioner. Accordingly, the details of IEDC claimed as per the Auditor's Certificate, IEDC allowed/disallowed in respect of the transmission asset are as under:



(₹ in lakh)		
IEDC claimed as per Auditor Certificate (A)	IEDC disallowed due to time overrun not condoned (B)	IEDC allowed (C)
978.56	0.00	978.56

Initial Spares

55. 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) *GIS Insulated Sub-station*
 - *(Green Field): 5.00%*
 - *(Brown Field): 7.00%*
 (v) *Communication System: 3.50%*
 (vi) *Static Synchronous Compensator: 6.00%*”

56. Initial Spares as claimed by the Petitioner for the transmission asset are as follows:

(₹ in lakh)					
Particulars	Plan & Machinery cost (A)	Initial Spares Claimed (B)	Ceiling (in %) (C)	Initial Spares Worked out $D = [(A-B)*C / (100-C)]$	Excess Initial Spares
TL	3908.24	39.05	1	39.08	Nil
S/s	748.05	14.78	6	46.80	Nil

57. The Petitioner has submitted that the Initial Spares claimed for the transmission asset are within the allowable limits as per the 2019 Tariff Regulations.

58. We have considered the Petitioner’s submissions. The Initial Spares claimed by the Petitioner for the transmission asset are within the ceiling as per the 2019 Tariff Regulations. The Initial Spares in respect of the transmission asset are allowed as per Regulation 23(d) of the 2019 Tariff Regulations, which are as follows:



(₹ in lakh)

Particulars	Plan & Machinery cost (A)	Initial Spares Claimed (B)	Ceiling Limit (in %) (C)	Allowable Initial Spares	Initial Spares allowed
				$D = [(A-B)*C / (100-C)]$	
TL	3908.24	39.05	1	39.08	39.05
Substation	748.05	14.78	6	46.80	14.78

Capital Cost allowed as on COD

59. The capital cost allowed on the COD is as follows:

(₹ in lakh)

Capital cost claimed till COD	Less: IDC disallowed	Less: IEDC disallowed	Less: Undischarged IDC	Capital cost allowed as on COD
5331.83	0.00	0.00	19.22	5312.61

Additional Capital Expenditure (“ACE”)

60. 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 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.”

61. The ACE claimed by the Petitioner in respect of the transmission asset is as follows:



(₹ in lakh)

Additional Capital Expenditure			Total
2023-24	2024-25	2025-26	
181.55	136.17	136.17	453.89

62. The Petitioner has submitted that the admissibility of ACE incurred after COD is to be dealt with in accordance with the provisions of Regulation 24 of the 2019 Tariff Regulations. The Petitioner has further submitted that the additional capitalization incurred for the transmission asset is on account of undischarged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date i.e., under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations.

63. The Petitioner has also submitted the following details of the liability flow statement with regard to the transmission asset:

(₹ in lakh)

Head wise/Party wise	Particulars	Outstanding Liability as on COD	Discharged Amount (Regulation 24(1)(a))				Unexecuted Work (Regulation 24(1)(b))			
			2023-24	2024-25	2025-26	Total	2023-24	2024-25	2025-26	Total
M/s Sri Ram Engg	TL	186.37	44.73	33.55	33.55	111.83	29.81	22.36	22.36	74.53
M/s Namdhari Industrial Traders Pvt Ltd	TL/Tower Supply	110.1	28.8	21.6	21.6	72	15.24	11.43	11.43	38.1
Hindustan Urban Infrastructure Limited	TL/Conductor	1.31	0	0	0	0	0.52	0.39	0.39	1.3
Survey/Compensation	TL	0.74	0	0	0	0	0.3	0.22	0.22	0.74
Jungle/Tree felling	TL	38.47	6.43	4.82	4.82	16.07	8.96	6.72	6.72	22.4
Misc. site packages for TL	TL	1.14	0.1	0.07	0.07	0.24	0.36	0.27	0.27	0.9
M/s. Deejay System Consultants Pvt Ltd	SS/Bays	112.97	33.07	24.8	24.8	82.67	12.12	9.09	9.09	30.3



Head wise/Party wise	Particulars	Outstanding Liability as on COD	Discharged Amount (Regulation 24(1)(a))				Unexecuted Work (Regulation 24(1)(b))			
			2023-24	2024-25	2025-26	Total	2023-24	2024-25	2025-26	Total
M/s. Site Packages for SS	SS/Bays	2.79	0.41	0.31	0.31	1.03	0.71	0.53	0.53	1.77
Total		453.89	113.53	85.15	85.15	283.84	68.02	51.01	51.01	170.04

64. The COD of the transmission asset is approved as 10.7.2023, and its cut-off date is 31.7.2026.

65. We have perused the Petitioner's submissions, and it is observed that the Petitioner has also claimed the projected ACE for the transmission asset for FY 2024-25 and FY 2025-26. The projected ACE of the Petitioner for FY 2024-25 and FY 2025-26 shall be dealt with in a separate Petition as per the 2024 Tariff Regulation in the future.

66. Therefore, the ACE claimed by the Petitioner for FY 2023-24 has been approved under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations as it is towards undischarged liabilities recognized to be payable at a future date and balance work deferred for execution. Thus, ACE allowed in respect of the transmission asset for the 2019-24 tariff period is as follows:

(₹ in lakh)		
Particulars	Regulations	ACE allowed (2023-24)
Balance and Retention Payments and Addition in Gross Block other than IDC	Regulations 24(1)(a) & 24 (1) (b) of the 2019 Tariff Regulations	181.55
IDC Discharged after COD		19.22
Total		200.77

67. The capital cost considered for the transmission asset for the 2019-24 tariff period is as under:

(₹ in lakh)		
Capital cost as on COD	ACE Allowed	Capital cost as on 31.03.2024
	2023-24	
5312.61	200.77	5513.38



Debt Equity Ratio

68. 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.”



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

Funding	Capital cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	3718.83	70.00	140.54	3859.37	70.00
Equity	1593.78	30.00	60.23	1654.01	30.00
Total	5312.61	100.00	200.77	5513.38	100.00

Depreciation

70. 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.”*

71. The depreciation has been worked out considering the admitted capital cost as on the COD, and ACE allowed in FY 2023-24. The Weighted Average Rate of Depreciation (WAROD) has been worked out as per the rates of depreciation prescribed in the 2019 Tariff



Regulations, and the WAROD is placed as an Annexure to this order. The depreciation allowed for the transmission asset is as follows

		(₹ in lakh)
Sl. No.	Particulars	2023-24 (pro-rata for 266 days)
A	Opening Capital Cost	5312.61
B	Addition due to projected ACE	200.77
C	Closing Capital Cost (A+B)	5513.38
D	Average Capital Cost (A+C)/2	5413.00
E	Average Capital Cost (90% depreciable assets)	5413.00
F	Average Capital Cost (100% depreciable assets)	0.00
G	Depreciable value (excluding IT equipment and software) (E*90%)	4871.70
H	Depreciable value of IT equipment and software (F*100%)	0.00
I	Total Depreciable Value (G+H)	4871.70
J	Weighted average rate of Depreciation (WAROD) (in %)	5.2800
K	Lapsed useful life at the beginning of the year (Year)	0
L	Balance useful life at the beginning of the year (Year)	33
M	Depreciation during the year (D*J)	207.72
N	Cumulative Depreciation at the end of the year	207.72
O	Remaining Aggregate Depreciable Value at the end of the year (I-N)	4663.98

Interest on Loan (IoL)

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

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

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

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

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

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

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



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

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

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

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

73. The Petitioner has claimed the Weighted Average Rate of Interest (WAROI) on loans based on its actual loan portfolio and the prevailing rate of interest. Interest on Loan (IOL) has been calculated based on the interest rate submitted by the Petitioner in accordance with Regulation 32 of the 2019 Tariff Regulations. 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 may be adjusted at the time of truing-up. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up.

74. 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:

Sl. No.	Particulars	(₹ in lakh)
		2023-24 (pro-rata for 266 days)
	Interest on Loan	
A	Gross Normative Loan	3718.83
B	Cumulative Repayments up to the Previous Year	0.00
C	Net Loan-Opening (A-B)	3718.83
D	Addition due to ACE	140.54
E	Repayment during the year	207.72
F	Net Loan-Closing (C+D-E)	3651.65
G	Average Loan (C+F)/2	3685.24
H	Weighted Average Rate of Interest on Loan (in %)	7.8655
I	Interest on Loan (G*H)	210.67

Return on Equity (RoE)

75. 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 cutoff date beyond the original scope excluding Additional Capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system 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:

$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$

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:

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

(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.”

76. The Petitioner has submitted that the MAT rate applies to it. Accordingly, the MAT rate applicable in the 2019-24 tariff period has been considered for the purpose of the RoE, which shall be trued up with the actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE in respect of the transmission asset is worked out and allowed as follows:



(₹ in lakh)

Sl. No.	Particulars	2023-24 (pro-rata for 266 days)
A	Opening Equity	1593.78
B	Addition due to ACE	60.23
C	Closing Equity (A+B)	1654.01
D	Average Equity (A+C)/2	1623.90
E	Return on Equity (Base Rate) (in %)	15.500
F	Tax Rate applicable (in %)	17.472
G	Rate of Return on Equity (Pre-tax) (in %)	18.782
H	Return on Equity (Pre-tax) (D*G)	221.66

Operation & Maintenance Expenses (O&M Expenses)

77. The O&M Expenses claimed by the Petitioner for the transmission asset for the 2019-24 period are as under:

(₹ in lakh)

Particulars	2023-24 (pro-rata 266 days)
132 kV D/C Roing (PG) - Chapakhowa (AEGCL) Transmission Line alongwith associated line bays at Roing (PG) and - Chapakhowa (AEGCL) end.	64.17

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

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

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



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

79. We have considered the Petitioner’s submissions. The O&M Expenses in respect of the transmission asset are worked out as per the norms specified in Regulation 35(3)(a) of the 2019 Tariff Regulations, and the same are as follows:

(₹ in lakh)	
Particulars	2023-24 (on Pro-rata of 266 days)
Transmission Line: Double Circuit (Single Conductor)	
• 132 kV Roing-Chapakhowa T/L (Total Length of line: 33.392 km)	
Norms as per Regulation (Rs. Per km)	0.433
O&M Expenses	10.51
Substation: 132 kV Bays	
• 2 Nos Bay at Roing Substation for 132 kV Roing-Chapakhowa D/C T/L	
• 2 Nos Bay at Chapakhowa substation for 132 kV Roing-Chapakhowa D/C T/L	
Norms as per Regulation (Rs. Per Bay)	18.46
O&M Expenses	53.66
Total O&M Expenses	64.17

Interest on Working Capital (IWC)

80. Regulations 34(1)(c), 34(3), 34(4) and 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:-

(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;”



81. The IWC has been worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) is considered as 12.00% (SBI 1-year MCLR applicable as on 1.4.2023 of 8.50% plus 350 basis points) for FY 2023-24. The components of the working capital and interest allowed thereon in respect of the transmission asset are as follows:

(₹ in lakh)		
Sl. No.	Particulars	2023-24 (pro-rata for 266 days)
A	Working Capital for O&M Expenses (O&M Expenses for one month)	7.36
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	13.24
C	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	121.23
D	Total Working Capital (A+B+C)	141.83
E	Rate of Interest for working capital (in %)	12.00
F	Interest on working capital (D*E)	12.37

Annual Fixed Charges for the 2019-24 Tariff Period

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

(₹ in lakh)	
Particulars	2023-24 (pro-rata for 266 days)
Depreciation	207.72
Interest on Loan	210.67
Return on Equity	221.66
O&M Expenses	64.17
Interest on Working Capital	12.37
Total	716.59

Filing Fee and Publication Expenses

83. 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.



Licence Fee and RLDC Fees and Charges

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

Goods and Services Tax

85. 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, and the same may be allowed to be recovered from the beneficiaries.

86. 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

87. 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 as per Regulation 35(3)(c) of the 2019 Tariff Regulations.

88. We have considered the Petitioner's submissions. The Petitioner has claimed the 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 the 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.

Capital Spares

89. The Petitioner has sought reimbursement of capital spares at the end of the 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

90. With effect from 1.11.2020, the sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 (2020 Sharing Regulations). Therefore, the sharing of the transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the billing, collection, and disbursement of the transmission charges approved in this order shall be governed by the provisions of the applicable 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

Interim Tariff

91. The Petitioner has prayed to allow the interim tariff, in accordance with Regulation 10(3) of the 2019 Tariff Regulations, to be included in the point-of-connection charges.

92. We have considered the Petitioner's submissions. Since we have determined the transmission tariff in respect of the transmission asset in this order, the Petitioner's prayer for the interim tariff is redundant.

93. To summarize, AFC allowed in respect of the transmission asset for the 2019-24 tariff period in this order are as follows:



(₹ in lakh)	
Particulars	2023-24 (pro-rata for 266 days)
AFC	716.59

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

95. This order disposes of Petition No. 86/TT/2024 in terms of the above findings and discussions.

sd/-
(Ravinder Singh Dhillon)
Member

sd/-
(Harish Dudani)
Member

sd/-
(Ramesh Babu V.)
Member

sd/-
(Jishnu Barua)
Chairperson



Annexure**(₹ in lakh)**

Capital Expenditure	Admitted Capital Cost as on COD (₹ in lakh)	Projected ACE	Admitted Capital Cost as on 31-3-2024 (₹ in lakh)	Rate of Depreciation as per Regulations (in %)	Annual Depreciation as per Regulations (₹ in lakh)
2019-24		2023-24			2023-24
Transmission Line	4515.29	149.57	4664.86	5.28	242.36
Substation	797.32	51.20	848.52	5.28	43.45
Total	5312.61	200.77	5513.38		285.81
				Average Gross Block (₹ in lakh)	5413.00
				Weighted Average Rate of Depreciation (in %)	5.28

