

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

PETITION NO. 90/TT/2024

Coram:

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

Date of Order: 27.01.2025

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 for the transmission asset: 1x500 MVA, 400/220 kV ICT (3rd) at 400/220 kV Sohawal (PG) Sub-station under “1x500 MVA, 400/220 kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening” in the Northern Region.

And in the matter of:

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

...Petitioner

Versus

- 1. Ajmer Vidyut Vitran Nigam Limited,**
Corporate Office, Vidyut Bhawan,
Panchsheel Nagar, Makarwali Road,
Ajmer-305004.
- 2. Jaipur Vidyut Vitran Nigam Limited,**
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017.
- 3. Jodhpur Vidyut Vitran Nigam Limited,**
New Power House, Industrial Area,
Jodhpur-342 003.



- 4. Himachal Pradesh State Electricity Board Limited,**
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004.
- 5. Uttar Pradesh Power Corporation Limited,**
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001.
- 6. Haryana Power Purchase Centre,**
Shakti Bhawan, Sector-6,
Panchkula-134109.
- 7. Jammu Kashmir Power Corporation Limited,**
220/66/33 kV Gladni Sub-station SLDC Building,
Narwal, Jammu.
- 8. Punjab State Power Corporation Limited,**
The Mall, PSEB Head Office,
Patiala-147001.
- 9. BSES Yamuna Power Limited,**
B-Block, Shakti Kiran Building (Near Karkardooma Court),
Karkardooma, 2nd Floor, New Delhi-110092.
- 10. BSES Rajdhani Power Limited,**
BSES Bhawan, Nehru Place,
New Delhi.
- 11. Tata Power Delhi Distribution Limited,**
33 kV Sub-station Building,
Hudson Lane, Kingsway Camp,
North Delhi-110009.
- 12. Uttarakhand Power Corporation Limited,**
Urja Bhawan, Kanwali Road,
Dehradun.
- 13. North Central Railway,**
Allahabad.
- 14. New Delhi Municipal Council,**
Palika Kendra, Sandsad Marg,
New Delhi-110002.



15. Chandigarh Electricity Department,
UT-Chandigarh, Div-11, Opposite - Transport Nagar,
Industrial Area Phase-I, Chandigarh.

...Respondent(s)

Party Present : Shri V. C. Shekhar, PGCIL

ORDER

The instant Petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the Petitioner”), a deemed transmission licensee, for the determination of tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) from the date of commercial operation (COD) to 31.3.2024 in respect of its transmission asset, 1x500 MVA, 400/220 kV ICT (3rd) at 400/220 kV Sohawal (PG) Sub-station (hereinafter referred to as the “transmission asset”) under “1x500 MVA, 400/220 kV ICT Augmentation (3rd) at Sohawal (PG) under System Strengthening” in the Northern Region (hereinafter referred to as the “transmission project”).

2. The Petitioner has made the following prayers in the instant Petition.

- “1) Admit the capital cost as claimed in the Petition and approve the Additional Capitalization incurred / projected to be incurred.*
- 2) Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para – 8.3 above.*
- 3) Condoned the Time overrun in commissioning of the instant asset.*
- 4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8 above for respective block.*
- 5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*



- 6) *Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 7) *Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses separately.*
- 8) *Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*
- 9) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*
- 10) *Allow interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.*

and pass such other relief as the 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 under:
 - a) The Investment Approval (the IA) and the expenditure sanction of the transmission project were accorded by the competent authority of the Petitioner on 4.2.2022 and circulated vide Memorandum Ref.: C/CP/PA2122-11-0AAB-IA033 dated 7.2.2022, at an estimated cost of ₹3141.00 lakh including an IDC of ₹88.00 lakh based on the September 2021 price level.
 - b) The scope of the transmission project was discussed and agreed upon in the 3rd meeting of NRPCTP held on 19.2.2021 and the 47th TCC and the 49th NRPC meeting held on 24.9.2021. Further, the transmission project has also been recommended for implementation through the Regulated Tariff Mechanism (RTM) route in the 5th meeting of the National Committee on Transmission (NCT) held on 25.8.2021 and 2.9.2021. Subsequently, the



Ministry of Power (MoP), GoI, vide OM (Ref. No. 15/3/2018-Trans-Part (1)) dated 1.12.2021 awarded the transmission project to CTUIL for implementation under the RTM. Further, CTUIL vide letter Ref. No: C/CTUIL/OM/02 dated 2.12.2021, awarded the Petitioner to implement the transmission project.

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

Sub-station

a) Augmentation with 400/220 kV, 1x500 MVA, Transformer (3rd) at Sohawal (PG) Sub-station

400 kV: 1x500 MVA, 400/230 kV Transformer

1 No. ICT Bay (AIS)

220 kV: 1 No. ICT Bay (AIS)

d) The transmission asset under the transmission project has been completed.

e) As per the IA dated 4.2.2022, the transmission project was scheduled to be commissioned in February 2023. Hence, the scheduled date of commercial operation (SCOD) of the transmission project comes to 28.2.2023, against which the transmission asset was commissioned on 8.7.2013. The details of the SCOD, COD and time over-run are as follows:

SCOD	COD	Delay (in days)
28.2.2023	8.7.2023	129

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



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

6. This order is issued considering the submissions made by the Petitioner vide affidavits dated 1.1.2024 and 26.4.2024.

7. After hearing the matter on 8.11.2024, the order was reserved. Having heard the representative of the Petitioner and perused the material on record, we proceed to dispose of the Petition.

Determination of Annual Fixed Charges for the 2019-24 Tariff Period

8. The Petitioner has claimed the following transmission charges for the transmission asset for the 2019-24 tariff period:

Particulars	(₹ in lakh)
	2023-24 (pro-rata 268 days)
Depreciation	87.76
Interest on Loan	84.27
Return on Equity	93.23
Interest on Working Capital	12.50
O&M Expenses	196.43
Total	474.19

9. The Petitioner has claimed the Interest on Working Capital (IWC) for the transmission asset for the 2019-24 tariff period as follows:

Particulars	(₹ in lakh)
	2023-24 (pro-rata 268 days)
O&M Expenses	22.35
Maintenance Spares	40.24
Receivables	79.62
Total Working Capital	142.21
Rate of Interest (in %)	12.00
Interest on Working Capital	12.50



Date of Commercial Operation (COD)

10. The Petitioner has claimed the actual COD of the transmission asset as 8.7.2023. To support its claim, the Petitioner has submitted a copy of the Energisation Certificate dated 14.6.2023 under Regulation 43 of the Central Electricity Authority (Measures relating to Safety and Electric Supply), Regulations 2010, RLDC Charging Certificate dated 11.8.2023 certifying the completion of successful trial operation on full load on 7.7.2023, the CMD certificate as required under the Grid Code, and self-declaration of COD letter dated 21.8.2023 in support of the actual COD of the transmission asset.

11. With respect to the date of commercial operation of a transmission system or element thereof and associated communication system, Regulation 5 of the 2019 Tariff Regulations provides as follows:

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

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

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

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

- (a) Energisation certificate issued by the Regional Electrical Inspector under Central Electricity Authority;*
- (b) Trial operation certificate issued by the concerned RLDC for charging element with or without electrical load;*
- (c) Implementation Agreement, if any, executed by the parties;*



- (d) Minutes of the coordination meetings or related correspondences regarding the monitoring of the progress of the generating station and transmission systems;*
- (e) Notice issued by the transmission licensee as per the first proviso under this clause and the response;*
- (f) Certificate of the CEO or MD of the company regarding the completion of the transmission system including associated communication system in all respects.”*

12. We have considered the Petitioner’s submissions. The copies of the CEA Energisation Certificate, and ‘on-load’ RLDC Charging Certificate are as follows:



File No. CC-AM-11-21/0134/2023/CERC Grp (Computer No. 660805)



भारत सरकार/Govt. of India
विद्युत मंत्रालय/Ministry of Power
केन्द्रीय विद्युत प्राधिकरण/Central Electricity Authority
मुख्य विद्युत निरीक्षणालय प्रभाग/Chief Electrical Inspectorate Division

CEI/2/EI/RIO (N)/Insp./2023/ 310

Dated: 14.06.2023

Approval for Energisation

(Under Regulation 43 of CEA (Measures relating to Safety and Electric Supply), Regulations, 2010)

Sh. Vineet Kumar,
General Manager, PGCIL,
400/220kV Sohawal S/s, Village: - Muzffarpur,
Post: Akhtiyarpur, Near Lohia Pul,
Bhelsar, Ayodhya.

Subject: Approval for Energisation of 1 No. ICT (500 MVA) and other installations in Bay No. 406 and electrical installations in Bay No. 204 as mentioned in List of Equipments in application of PGCIL, Sohawal S/s under Regulation 43 of the Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2010 (as amended).

Ref:

1. Online Application A/2023/11535 dated 17.05.2023.
2. CEI/2/EI/RIO (N)/Insp./2023/295 dated: 06.06.2023
3. Your compliance report dated: 13.06.2023

Whereas the inspection of 1 No. ICT (500 MVA) and other installations in Bay No. 406 and electrical installations in Bay No. 204 as mentioned in List of Equipments in application of PGCIL, Sohawal S/s was carried out by the undersigned on 03.06.2023.

The non-compliances of certain provisions/stipulations of the regulations were conveyed to you vide our office letter under reference at Sl. No. (2) above (Inspection Report) and the compliance of the same has since been received vide your letter under reference at Sl.No. (3) above. *The Approval for energization of 1 No. ICT (500 MVA) and other installations in Bay No. 406 and electrical installations in Bay No. 204 as mentioned in List of Equipments (attached herewith) in application of PGCIL, Sohawal S/s is hereby accorded subject to consistent compliance of relevant provisions of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 (as amended till date) by PGCIL.*





ग्रिड-इंडिया
GRID-INDIA

ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
(भारत सरकार की अधीन)
GRID CONTROLLER OF INDIA LIMITED
(A Government of India Enterprise)

[Formerly Power System Operation Corporation Limited (POSOCO)]

उत्तर क्षेत्रीय भार वितरण केंद्र / **Northern Regional Load Despatch Centre**

कार्यालय : 18-ए, शाहीद जेत सिंह सनसवाल मार्ग, कटवारिया सराय, नई दिल्ली - 110016
Office : 18-A, Shaheed Jeet Singh Sansanwal Marg, Katwaria Sarai, New Delhi-110016
CIN : U40105DL2009GOI188682, Website : www.nrldc.in, E-mail : nrldc@grid-india.in, Tel. 011- 26854015, 40224803

Certificate Number: GRID-INDIA/NRLDC/SO/438

Date: 11-08-2023

Certificate of completion of Trial Operation of 400/220/33kV, 500 MVA, 3-Phase, TOSHIBA, ICT - 3 along with associated bays no 406 (400kV side) and 204 (220kV side) at Sohawal(PG)

Reference:

1. **POWERGRID** Communication dated **12 Apr 2023 11:56, 12 Apr 2023 12:01, 13 Apr 2023 12:35, vide Format - I and 08 Jun 2023 15:17, 09 Jun 2023 14:52, 17 Jun 2023 06:42, 22 Jun 2023 15:59, vide Format - III** regarding the submission of pre charging documents for -

- i) 400/220/33kV, 500 MVA, 3-Phase, TOSHIBA, ICT - 3 at Sohawal(PG)
- ii) 400kV Main Bay 406 of 400/220/33KV,500MVA,3-Ph,ICT-III(400 KV SIDE) at Sohawal(PG)
- iii) 220kV Main Bay 204 of 400/220/33kV,500MVA. 3-Ph , ICT-III (220kv Side) at Sohawal(PG)

2. **NRLDC** Acknowledgement vide Format - II **19 Apr 2023 09:19** and Provisional Approval vide Format - IV **26 Jun 2023 09:47**.

3. Real time code issued by **NRLDC** on request of **POWERGRID** Real Time Code No-2306 - 5690

4. **POWERGRID** , Communication dated **04 Jul 2023 13:11**, vide Format - V regarding the submission of post charging documents.

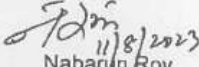
Based on above references, it is hereby certified that the following Transmission elements have been successfully completed the trial operation:

Name of the Transmission Asset:	1.400/220/33kV, 500 MVA, 3-Phase, TOSHIBA, ICT - 3 along with associated bays no 406 (400kV side) and 204 (220kV side) at Sohawal(PG)
Owner of the Transmission Asset:	1. POWERGRID
Date and Time of Energization for commencement of successful trial run operation	1. 06.07.2023- 18:00 hrs.
Date/Time of completion of successful trial run operation	2. 07.07.2023- 18:00 hrs.

Note:

There is one and half breaker scheme at 400kV Sohawal(PG) and dia (both main and tie bay) is in charged condition.

This certificate is being issued in accordance with Regulation 6.3(A)(5) of CERC(Indian Electricity Grid Code) Regulation,2010 to certify successful completion of trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.


11/8/2023
Nabarun Roy

Executive Director

13. Taking into consideration the CEA Energization Certificate, RLDC Charging Certificate, and CMD Certificate, the COD of the transmission asset is approved as 8.7.2023.



Capital Cost

14. Regulation 19 of the 2019 Tariff Regulations provides as under:

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

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

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

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

- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly tried up by*



- excluding liability, if any, as on 1.4.2019;*
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
 - (c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;*
 - (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
 - (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
 - (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (4) The capital cost in case of existing or new hydro generating station shall also include:*
- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
 - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*
- (5) The following shall be excluded from the capital cost of the existing and new projects:*
- (a) The assets forming part of the project, but not in use, as declared in the tariff petition;*
 - (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*
- Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be de-capitalised only after its redeployment;*
- Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.*
- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;*
 - (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and*
 - (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”*

15. The Petitioner has claimed the following capital cost incurred as on COD and Additional Capital Expenditure (ACE) projected to be incurred in respect of the



transmission asset and has submitted the Auditor's Certificate dated 21.11.2023 in support of the same:

(₹ in lakh)

FR Approved cost	Capital cost as on COD	Projected ACE			Estimated Completion Cost as on 31.3.2024
		2023-24	2024-25	2025-26	
3141.00	1984.00	563.50	563.50	0.00	3111.00

Cost Overrun

16. The Petitioner has submitted that there is a cost variation between the FR approved cost and the estimated completion cost.

17. The Petitioner has submitted the item-wise cost variation details between the FR approved cost and the estimated completion cost and the same are as follows:

(₹ in lakh)

Sl. No	Description	FR Approved Cost	Estimated Capital Cost	Variation (-decrease + increase)
		a	b	c = b - a
B	Sub-stations			
1	Foundation for structures	168.27	195.65	27.38
2	Miscellaneous Civil works	20.00	0	-20
3	Transformer	1946.31	2221.81	275.50
4	Switchgear (CT, PT, CB, Isolator etc.)	223.05	146.83	-76.22
5	Control, Relay and Protection Panel	103.91	100.75	-3.16
6	Structure for switchyard	45.21	80.49	35.28
7	Miscellaneous (Auxiliaries)	92.54	147.3	54.76
8	Spares	84.69	125.23	40.54
9	Over heads	369.02	58.86	-310.16
10	Interest During Construction (IDC)	88.00	34.08	-53.92
	TOTAL	3141.00	3111.00	-30.00

18. The Petitioner has further submitted the following major reasons for cost variation with respect to FR:

i. Decrease in IDC and IEDC Cost:

There is a reduction of around ₹364 lakh (with respect to IDC and IEDC) based on the actual cost.



ii. Variation in Equipment Cost

a) Being a Government enterprise, the Petitioner has an obligation to the indigenous development of manufacturing as well as to adhere to the Government of India guidelines in vogue. Accordingly, the Petitioner has been following a well laid down procurement policy which ensures both transparency and competitiveness in the bidding process. The route of a Domestic Competitive Bidding process has been followed to award the transmission project. Through this process, the lowest possible market prices for required products/services/as per detailed designing were obtained, and the contracts were awarded on the basis of the lowest evaluated eligible bidder. The best competitive bid prices against the tenders may vary as compared to the cost estimate depending upon the prevailing market conditions, design, and site requirements. Whereas, the estimates are prepared by the Petitioner as per well-defined procedures for cost estimate. The FR cost estimate is a broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts/general practice. The cost received during Domestic Competitive Bidding for the transformer is higher than the estimated cost.

19. We have considered the Petitioner's submissions. As the estimated completion cost of the transmission asset ₹3111.00 lakh is within the approved FR cost of ₹3141.00 lakh and thus there is no cost over-run with respect to the transmission asset. Therefore, the capital cost claimed by the Petitioner is hereby allowed.



20. Further, for the 2019-24 tariff period, the capital cost as on the COD and ACE for the FY 2023-24 would be considered for the determination of transmission tariff up to 31.3.2024 in instant order.

Time over-run

21. As per the IA dated 4.2.2022, the transmission project was scheduled to be commissioned in February 2023. Also, as per the MoP OM dated 1.12.2021, the implementation timeframe for the transmission project was 15 months from the date of the OM. Accordingly, the scheduled commissioning date is 28.2.2023, against which the transmission project was put into commercial operation as per the following details:

IA date	SCOD	COD	Time over-run
4.2.2022	28.2.2023	8.7.2023	129 days

22. The Petitioner has submitted that there is a delay of 129 days in the commissioning of the transmission asset vis-à-vis the SCOD of February 2023. The IA was accorded on 4.2.2022. Subsequently, the LoA was placed on 27.4.2022. Thereafter, the Petitioner, with its project implementation expertise and experience, took all the efforts to complete the transmission project, and the transmission asset was commissioned on 8.7.2023.

23. Based on the unforeseen delay reasons, the Petitioner has requested that the delay in completing the transmission asset be condoned on merits being out of its control.

24. In response to the Technical Validation dated 15.4.2024, the Petitioner, vide affidavit dated 26.4.2024, has submitted the details of the reasons for time overrun,



correspondence exchanged, and chronology of the time overrun along with the required documents. The details of time over-run are as follows:

Activity	As per planned		As per Actual		Delay (In days)
	Start	Finish	Start	Finish	
NOA	28.2.2022	28.2.2023	27.4.2022	26.4.2023	57
Supplies	20.5.2022	15.1.2023	29.8.2022	5.5.2023	110
Foundation	15.4.2022	15.12.2022	16.8.2022	14.3.2023	89
Erection	15.11.2022	31.1.2023	15.3.2023	31.5.2023	120
Stringing	1.2.2023	17.2.2023	1.6.2023	15.6.2023	118
Testing and Commissioning	18.2.2023	28.2.2023	15.6.2023	7.7.2023	130

Analysis & Decision

25. As per the IA dated 4.2.2022 and MoP OM dated 1.12.2021, the transmission asset was scheduled to be commissioned by 28.2.2023, against which it was put into commercial operation on 8.7.2023 with a time over-run of 129 days.

26. We have considered the Petitioner’s submissions. On perusal of Form-12, it is noted that there is a substantial delay in supply as compared to the actual schedule which resulted in the time over-run in the commissioning of the transmission asset. We think it proper here to refer to Regulation 22(1) of the 2019 Tariff Regulations as under:

“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.”*



27. In appreciation of the material placed on record, we are of the view that the Petitioner is unable to prove that the commissioning of the transmission asset was impacted by any change in law or force majeure events. As per Regulation 22(1)(b) of the 2019 Tariff Regulations, if the delay in the commissioning of the transmission asset is on account of the contractor or supplier or agency of the generating company or the transmission licensee, the same shall fall under the controllable factors. In the instant case, the delay reasons submitted by the Petitioner fall under the controllable factors. Hence, we are not inclined to condone the time over-run of 129 days. The details of time over-run condoned/not condoned in respect of the transmission asset are as under:

SCOD as per IA	Actual COD	Time over-run	Time over-run condoned	Time over-run not condoned
28.2.2023	8.7.2023	129 days	0 days	129 days

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

28. 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:

IDC as per the Auditor's Certificate	IDC Discharged up to the COD	IDC discharged during 2023-24	(₹ in lakh)
			IDC discharged during 2024-25
34.08	21.62	12.46	0.00

29. We have considered the Petitioner's submissions. As discussed above in this order, the time overrun in the commissioning of the transmission asset has not 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 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 on COD (E)=(C)-(D)	IDC discharged in 2023-24 (F)
34.08	31.40	2.68	2.68	0.00	2.68

30. 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 not been condoned, there is a proportionate disallowance of IEDC of ₹14.83 lakh. Accordingly, the details of IEDC claimed as per the Auditor's Certificate, IEDC allowed/disallowed are as under:

(₹ in lakh)		
IEDC as per the Auditor's Certificate (A)	IEDC disallowed due to time overrun not condoned (B)	IEDC allowed (C) = (A-B)
58.86	14.83	44.03

Initial Spares

31. Regulation 23(d) of the 2019 Tariff Regulations provides that the Initial Spares shall be capitalised as a percentage of the plant and machinery cost up to the cut-off date, subject to the following ceiling norms:

“(d) Transmission System

- (i) Transmission line- 1.00%
- (ii) Transmission sub-station
 - Green Field- 4.00%
 - Brown Field- 6.00%
- (iii) Series Compensation devices and HVDC Station- 4.00%
- (iv) Gas Insulated Sub-station (GIS)
 - Green Field- 5.00%
 - Brown Field- 7.00%
- (v) Communication System- 3.50%
- (vi) Static Synchronous Compensator- 6.00%”



32. The Initial Spares claimed by the Petitioner are as under:

(₹ in lakh)

Particulars	Plant and machinery cost	Initial Spares claimed	Ceiling (in %)	Initial Spares worked out
Sub-station	3018.06	125.23	6.00	184.65

33. We have considered the Petitioner's submissions. Based on the information available on record, the Initial Spares for the transmission asset are allowed as per the respective percentage of plant and machinery cost as on the cut-off date on individual basis. The Initial Spares allowed for the transmission asset are as follows:

Particulars	Plant and Machinery cost (excluding IDC/IEDC, Land cost, and Cost of Civil Works) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2019 Tariff Regulations (in %)	Initial Spares allowable (₹ in lakh)	Initial Spares disallowed (₹ in lakh)	Initial Spares Allowed (₹ in lakh)
	A	B	C	$D=(A-B)*C/(100-C)$	$E=B-D$	
Sub-station	3018.06	125.23	6.00	184.64	0.00	125.23

34. We observe that there are no excess Initial Spares for the transmission asset. Therefore, the Initial Spares have been allowed, as claimed by the Petitioner. The capital cost allowed on the COD is as follows:

(₹ in lakh)

Capital cost claimed as on COD (Auditor's Certificate) (A)	IDC Disallowed (B)	Undischarged IDC as on COD (C)	IEDC Disallowed (D)	Capital Cost as on COD (E) = (A-B-C-D)
1984.00	31.40	2.68	14.83	1935.09

Additional Capital Expenditure (ACE)

35. Regulations 24 and 25 of the 2019 Tariff Regulations provide as under:



“24. Additional Capitalisation within the original scope and up to the cut-off date

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

- (a) Undischarged liabilities recognized to be payable at a future date;*
- (b) Works deferred for execution;*
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;*
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;*
- (e) Change in law or compliance of any existing law; and*
- (f) Force Majeure events:*

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

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

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

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

- (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- (b) Change in law or compliance of any existing law;*
- (c) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (d) Liability for works executed prior to the cut-off date;*
- (e) Force Majeure events;*
- (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; Raising of ash dyke as a part of ash disposal system.*

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

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



- (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
- (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission.”

36. The ACE claimed by the Petitioner for the transmission asset is as follows:

(₹ in lakh)

Cost as per the FR Approved Cost	Capital cost as on COD	Projected ACE			Capital Cost as on 31.3.2024
		2023-24	2024-25	2025-26	
3141.00	1984.00	563.50	563.50	0.00	3111.00

37. The Petitioner, vide affidavit dated 26.4.2024, has submitted the following package-wise and vendor-wise details of the ACE claimed, including the details of balance and retention payments:

Party Name	Particulars (TL/SS)	Year of Actual Capitalization	Outstanding Liability as on COD	Discharge			Additional Liability Recognized (Unexecuted works)			Outstanding Liability as on 31.3.2024 (To be discharged during 2024-29)
				2022-23	2023-24	Total (19-24)	2022-23	2023-24	Total (19-24)	
1 M/s. Toshiba T&D System India (Pvt) Ltd (LOA-150013 & 150014)	Sub-station Work	2023	316.77	0.00	0.00	0.00	0.00	552.19	552.19	316.77
2 M/s. Hartek Power Pvt Ltd (200011 & 200012)	IT Equipment	2023	0.00	0.00	0.00	0.00	0.00	11.31	11.31	0.00
Total								563.50	563.50	316.77

38. We have considered the Petitioner’s submissions. It has been observed that the Petitioner has also claimed the ACE for the FY 2024-25, which shall be dealt with as per the 2024 Tariff Regulations in the 2024-29 tariff period.



39. Further, the ACE claimed by the Petitioner for the FY 2023-24 has been allowed under Regulation 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations on account of the balance and retention payments for the works already executed. The actual/projected ACE allowed is subject to truing up in respect of the transmission asset, and the same is as follows:

Particulars	(₹ in lakh)
	2023-24
ACE, as per the Auditor's Certificate allowed under Regulation 24(1)(a) and 24(1) (b) of the 2019 Tariff Regulations towards undischarged liabilities recognised to be payable at a future date	563.50
Add: IDC Discharged	2.68
ACE allowed in the instant order	566.18

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

Capital cost as on COD	(₹ in lakh)	
	ACE allowed 2023-24	Capital Cost as on 31.3.2024
1935.09	566.18	2501.27

Debt-Equity ratio

41. Regulation 18 of the 2019 Tariff Regulations provides as under:

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

Provided that:

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

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



meeting the capital expenditure of the generating station or the transmission system.

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

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

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

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

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

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

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

42. The 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:

Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	1354.56	70.00	396.32	70.00	1750.89	70.00
Equity	580.53	30.00	169.85	30.00	750.38	30.00
Total	1935.09	100.00	566.18	100.00	2501.27	100.00



Depreciation

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

44. 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 as per the rates of depreciation prescribed in the 2019 Tariff Regulations, and the WAROD table is placed as an Annexure to this order. The depreciation allowed for the transmission asset is as follows:



Sl. No.	Particulars	(₹ in lakh)
		2023-24 (Pro-rata 268 days)
A	Opening Gross Block	1935.09
B	Addition during the year 2019-24 due to projected ACE	566.18
C	Closing Gross Block (A+B)	2501.27
D	Average Gross Block (A+C)/2	2218.18
E	Average Gross Block (90% depreciable assets)	2212.53
F	Average Gross Block (100% depreciable assets)	5.66
G	Depreciable value (excluding IT equipment and software) (E*90%)	1991.27
H	Depreciable value of IT equipment and software (F*100%)	5.66
I	Total Depreciable Value (G+H)	1996.93
J	Weighted average rate of Depreciation (WAROD) (in %)	5.3048
K	Lapsed useful life at the beginning of the year	0
L	Balance useful life at the beginning of the year	25
M	Depreciation during the year (D*J)	86.16
N	Cumulative Depreciation at the end of the year (M+N)	86.16
O	Remaining Aggregate Depreciable Value at the end of the year (I-N)	1910.77

Interest on Loan (IoL)

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

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

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

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

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

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

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



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

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

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

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

46. The Weighted Average Rate of Interest (WAROI) on loans has been considered on the basis of the rates prevailing as on COD for the respective loans. The Petitioner has prayed that the change in the interest rate due to the floating rate of interest applicable, if any, during the 2019-24 tariff period may be adjusted. Accordingly, the floating rate of interest, if any, will be considered at the time of truing-up. The IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL allowed in respect of the transmission asset is as follows:

		(₹ in lakh)
	Particulars	2023-24 (Pro-rata 268 days)
	Interest on Loan	
A	Gross Normative Loan	1354.56
B	Cumulative Repayments up to the Previous Year	0.00
C	Net Loan-Opening (A-B)	1354.56
D	Additions	396.32
E	Repayment during the year	86.16
F	Net Loan-Closing (C+D-E)	1664.72
G	Average Loan (C+F)/2	1509.64
H	Weighted Average Rate of Interest on Loan (in %)	7.4836
I	Interest on Loan (G*H)	82.73

Return on Equity (RoE)

47. Regulations 30 and 31 of the 2019 Tariff Regulations provide as under:

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



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

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

Provided further that:

- i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;*
- ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;*
- iii. in case of a thermal generating station, with effect from 1.4.2020:*
 - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;*
 - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:*

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

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

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



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

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

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.”

48. The Petitioner has submitted that the MAT rate is applicable 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 has been worked out and allowed as follows:



(₹ in lakh)

	Particulars	2023-24 (Pro-rata 268 days)
	Return on Equity	
A	Opening Equity	580.53
B	Additions	169.85
C	Closing Equity (A+B)	750.38
D	Average Equity (A+C)/2	665.45
E	Return on Equity (Base Rate) (in %)	15.500
F	MAT Rate for respective year (in %)	17.472
G	Rate of Return on Equity (in %)	18.782
H	Return on Equity (D*G)	91.52

Operation & Maintenance Expenses (O&M Expenses)

49. 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 268 days)
Sub-station	
i. 400 kV Sub-station	
ii. 220 kV Sub-station	
iii. 400 kV Sub-station ICT	
Sub-station: 400 kV Sub-station	
Number of ICT bays	1
Norms (₹ lakh/bay)	36.91
Sub-station: 220 kV Sub-station	
Number of ICT bays	1
Norms (₹ lakh/bay)	25.84
Sub-station: 400 kV Sub-station ICT	
Rating of ICT (in MVA)	500
Norms (₹ lakh/MVA)	0.411
Total O&M Expenses	196.43

50. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations provides as under:

“35. Operation and Maintenance Expenses:

...

- (4) *Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:*



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942



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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
- iii. the O&M expenses of ± 500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
- iv. the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;*
- v. the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years*

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

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

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



51. We have considered the Petitioner’s submission. The O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations, and the same are as follows:

(₹ in lakh)	
Particulars	2023-24 (Pro-rata 268 days)
Sub-station Bays	
400 kV Bays	1
Norms (₹ lakh/bay)	36.91
O&M Expenses Allowed (A)	27.03
220 kV Bays	1
Norms (₹ lakh/bay)	25.84
O&M Expenses Allowed (B)	18.92
400/220 kV Sub-station ICT	
Rating of 1 No. 400/220 kV ICT (in MVA)	500
Norms (₹ lakh/bay)	0.411
O&M Expenses Allowed (C)	150.48
Total O&M Expenses allowed (A+B+C)	196.43

Interest on Working Capital (IWC)

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

“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;”

53. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 11.25%.

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

		(₹ in lakh)
	Particulars	2023-24 (Pro-rata 268 days)
	Interest on Working Capital	
A	Working Capital for O&M Expenses (O&M Expenses for one month)	22.35
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	40.24
C	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	78.79
D	Total Working Capital (A+B+C)	141.38
E	Rate of Interest (in %)	12.00
F	Interest on working capital (D*E)	12.42

Annual Fixed Charges (AFC) for the 2019-24 Tariff Period

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



(₹ in lakh)	
Particulars	2023-24 (Pro-rata 268 days)
Annual Transmission Charges	
Depreciation	86.16
Interest on Loan	82.73
Return on Equity	91.52
O&M Expenses	196.42
Interest on Working Capital	12.42
Total	469.25

Filing Fee and the Publication Expenses

56. The Petitioner has sought reimbursement of the fee paid by it for filing the petition and publication expenses.

57. We have considered the Petitioner's submissions. The Petitioner is entitled to the reimbursement of the filing fees and publication expenses in connection with the present petition directly from the beneficiaries in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

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

Goods and Services Tax

59. The Petitioner has submitted that if GST is levied at any rate and at any point of time in the 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.

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

Security Expenses

61. The Petitioner has submitted that security expenses in respect of the 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.

62. 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

63. 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

64. 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.

65. To summarise:

- a. The Annual Fixed Charges allowed for the transmission asset for the 2019-24 tariff period are as follows:

(₹ in lakh)	
AFC	2023-24 (pro-rata 268 days)
	469.25

66. Annexure to this order form part of the order.

67. This order disposes of Petition No. 90/TT/2024 in terms of the above findings and discussions.

sd/-
(Harish Dudani)
Member

sd/-
(Ramesh Babu V.)
Member

sd/-
(Jishnu Barua)
Chairperson



ANNEXURE-I

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations (in %)	Annual Depreciation as per Regulations (₹ in lakh)
		2023-24	Total			2023-24
Sub-station	1935.09	554.87	554.87	2489.96	5.28	116.82
IT Equipment (Incl. Software)	-	11.31	11.31	11.31	15.00	0.85
Total	1935.09	566.18	566.18	2501.27		117.67
Average Gross Block (₹ in lakh)						2218.18
Weighted Average Rate of Depreciation (in %)						5.30

