

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 127/TT/2024

Coram:

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

Date of Order: 18.08.2025

In the matter of:

Approval of the transmission tariff under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for determination of the transmission tariff from the COD to 31.3.2024 for Asset 1: 01 No. 400/220 kV, 500 MVA ICT along with associated bays at Bhatapara Sub-station under "Augmentation of 1x500 MVA, 400/220 kV ICT (3rd) at Bhatapara (PG)" in the Western Region.

And in the matter of:

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

...Petitioner

Vs.

- 1. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Rampur,
Jabalpur-482008.**
- 2. Madhya Pradesh Audyogik Kendra,
Vikas Nigam (Indore) Limited, 3/54, Press Complex,
Agra-Bombay Road, Indore-452008.**
- 3. Maharashtra State Electricity Distribution Company Limited,
Hongkong Bank Building, 3rd Floor,
M.G. Road, Fort, Mumbai-400001.**



4. **Gujarat Urja Vikas Nigam Limited,**
Sardar Patel Vidyut Bhawan,
Race Course Road, Vadodara-390007.
 5. **Electricity Department,**
Government of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa-403001.
 6. **Electricity Department,**
Administration of Daman & Diu,
Daman-396210.
 7. **DNH Power Distribution Corporation Limited,**
Vidyut Bhawan, 66 kV Road, Near Secretariat Amli,
Silvassa-396230
 8. **Chhattisgarh State Power Distribution Company Limited,**
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh-492013.
 9. **Chhattisgarh State Power Transmission Company Limited,**
Office of the Executive Director (C&P),
State Load Despatch Building,
Dangania, Raipur-492013.
- ... Respondent(s)**

Parties Present : Shri Mohd. Mohsin, PGCIL
Shri Vishal Sagar, PGCIL
Shri Arjun Malhotra, PGCIL
Shri Ashish Alankar, PGCIL
Ms. Ashita Chauhan, PGCIL

ORDER

Power Grid Corporation of India Limited has filed the instant Petition for the determination of the transmission tariff from the date of commercial operation (COD) to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of Asset 1: 01 No. 400/220 kV, 500 MVA ICT along with associated bays at Bhatapara Sub-station (hereinafter referred to as “the transmission asset”) under



“Augmentation of 1x500 MVA, 400/220 kV ICT (3rd) at Bhatapara (PG)” (hereinafter referred to as “the transmission project”) in the Western Region.

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

- 1) *“Approve the DOCO as claimed in the instant petition and condone the time over run.*
- 2) *Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this Petition, as per para – 7 above.*
- 3) *Admit the capital cost as claimed in the Petition and approve the Additional Capitalization incurred/projected to be incurred.*
- 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 bill and adjust the impact on Interest on Loan due to a change in the Interest rate on account of the floating rate of interest applicable during the 2019-24 period, if any, from the beneficiaries.*
- 8) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*
- 9) *Allow interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.*

and pass such other relief as Hon’ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.”



Background

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

(i) The Investment Approval (IA) for the transmission project was accorded by the competent authority of the Petitioner's company on 12.2.2022 and circulated vide Memorandum No. C/CP/PA2122-11-0AAC-IA034 dated 14.2.2022 at an estimated cost of ₹3826.00 lakh, including an Interest During Construction (IDC) of ₹145.00 lakh based on the September 2021 price level.

(ii) The scope of work as per the IA is as under:

Sub-station:

a) 1x500 MVA, 400/220 kV 3rd ICT along with associated bays at Bhatapara (PG) Sub-station

i. **400 kV**

- Transformer Bays: 1 No.
- 500 MVA, 400/220 kV ICT: 1 No.

ii. **220 kV**

- Transformer Bays: 1 No.

(iii) The transmission project, on account of operational constraints [(N-1) non-compliance], was discussed in the 3rd WRPC (TP) meeting held on 14.6.2021. After the deliberation in the 5th meeting of NCT held on 25.8.2021 and 2.9.2021, the transmission project was approved under ISTS. Subsequently, the Ministry of Power (MoP), GoI, vide Office Memorandum dated 1.12.2021, awarded the "Augmentation of 1x500 MVA, 400/220 kV ICT (3rd) at Bhatapara (PG)" scheme



to CTUIL for implementation under the Regulated Tariff Mechanism (RTM) mode by the Petitioner.

(iv) The details of the transmission assets covered under the transmission project is as under:

Name of Asset	SCOD	COD Claimed under Regulation 5(2) of the 2019 Tariff Regulations
01 No. 400/220 kV, 500 MVA ICT at Bhatapara, along with ICT bays	May 2023	11.10.2023

(v) The entire scope of the transmission project is complete and is covered in the instant Petition.

4. The Respondents, mainly beneficiaries of the Western Region, are Distribution Licensees, Transmission Licensees and Power Departments, which are procuring transmission services from the Petitioner.

5. The Petitioner has served a copy of the Petition on the Respondents, and notice regarding the filing 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. Respondent No. 1, Madhya Pradesh Power Management Company Limited (MPPMCL) and Respondent No. 3, Maharashtra State Electricity Distribution Company Limited (MSEDCL), vide affidavits dated 16.1.2025 and 10.1.2025 respectively, have filed their replies and have, inter alia, raised the issue of the proposed COD and delay in commissioning of the transmission asset, sharing of transmission



charges and GST claim. The Petitioner has filed rejoinders to the replies filed by MPPMCL and MSEDCL, vide separate affidavits dated 21.2.2025.

6. The hearing in the matter was held on 25.2.2025, and the order was reserved. This order is being issued considering the submissions made by the Petitioner in the Petition vide affidavit dated 29.12.2023 and the Petitioner's subsequent affidavits dated 7.5.2024 and 24.2.2025, reply filed by MPPMCL and MSEDCL vide affidavits dated 16.1.2025 and 10.1.2025 respectively, and the Petitioner's rejoinders to the reply of MPPMCL and MSEDCL vide separate affidavits dated 21.2.2025.

7. 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 2019-24 TARIFF PERIOD

8. The Petitioner has claimed the following transmission charges for the transmission asset:

(₹ in lakh)	
Particulars	2023-24 (pro-rata for 173 days)
Depreciation	74.36
Interest on Loan	73.62
Return on Equity	77.17
Interest on Working Capital	8.87
O&M Expenses	126.80
Total AFC	360.82

9. The Petitioner has claimed the following Interest on Working Capital (IWC) for the transmission asset:

(₹ in lakh)	
Particulars	2023-24 (pro-rata for 173 days)
O&M Expenses	22.35
Maintenance Spares	40.24



Particulars	2023-24 (pro-rata for 173 days)
Receivables	93.85
Total Working Capital	156.44
Rate of Interest (in %)	12.00
Interest on Working Capital	8.87

Date of Commercial Operation (“COD”)

10. The Petitioner has claimed the COD of the transmission asset as 11.10.2023 under Regulation 5(2) of the 2019 Tariff Regulations, as the associated downstream intra-State line, i.e., Bhatapara (PG)-Suhela 220 kV T/C line at Bhatapara (CSPTCL), being executed by CSPTCL, scheduled to be commissioned by May 2023, has not yet been commissioned. In support of the proposed COD, the Petitioner has submitted the CEA Energisation Certificate, WRLDC Trial-run Certificate, Self-declaration COD letter and CMD Certificate as required under the Grid Code.

11. MPPMCL has submitted that the proposed COD may not be approved, as the Petitioner has failed to provide satisfactory justification for the delay in completing the transmission project. MPPMCL has submitted that the associated 220 kV transmission line between Bhatapara (PG) – Bhatapara (CSPTCL) was not ready for commissioning as on the date proposed by the Petitioner. Although the ICT was energized, it did not provide any service to the beneficiaries as no power flow commenced through it for the associated transmission system. The absence of established power flow confirms that the project covered under the instant Petition was not operational; evidently, the transmission service was not provided, and the project was not available for use by the beneficiaries. MPPMCL has supported its contention by referring to the Hon’ble Supreme Court’s judgment dated 3.3.2016 in Civil Appeal No. 9193 of 2012, in the case of “PGCIL



vs. PSPCL & Ors., reported as (2016) 4 SCC 797", wherein the Hon'ble Supreme Court, inter alia, held that the COD of the transmission lines can be achieved only on the fulfilment of certain conditions.

12. MSEDCL has submitted that the proposed COD should not be approved, as the Petitioner has failed to provide any satisfactory justification for the delay in completing the transmission project, and the Petitioner sought any extension for the same in advance. The transmission project was awarded to the Petitioner in December 2021, thereby granting the Petitioner ample time to plan and implement the transmission project in adherence to the Scheduled Commercial Operation Date (SCOD) of May 2023.

13. The Petitioner, vide separate affidavits dated 21.2.2025 in its rejoinder to the reply of MPPMCL and MSEDCL, has submitted the justification for the time delay in commissioning the instant transmission asset. The same will be dealt with in the relevant paragraphs of the instant order.

14. In response to the Commission's query, the Petitioner vide affidavit dated 24.2.2025 has submitted as under:

- a. The 400/220 kV ICT at Bhatapara is the third ICT at Bhatapara. Upon commissioning the ICT, the active power flow was recorded, and, hence, the On-load Trial Operation Certificate was issued by the WRLDC. Since commissioning, the ICT is in use and the power has been flowing through the existing 220 kV downstream system; therefore, the tariff as claimed may kindly be allowed.
- b. In the notification of the commercial operation (COD), the provision referred to is Regulation 5(1) of the 2019 Tariff Regulations. The Commission is requested



to consider Regulation 5(1) of the 2019 Tariff Regulations for the grant of COD of the instant transmission asset.

15. We have considered the Petitioner's, MPPMCL's and MSEDCL's submissions.

Regulation 5 of the 2019 Tariff Regulations provides as under:

"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.*
- (3) The date of commercial operation in case of integrated mine(s), shall mean the earliest of*
- (a) the first date of the year succeeding the year in which 25% of the Peak Rated Capacity as per the Mining Plan is achieved; or*
 - (b) the first date of the year succeeding the year in which the value of production estimated in accordance with Regulation 7A of these regulations, exceeds total expenditure in that year; or*
 - (c) the date of two years from the date of commencement of production:*



Provided that on earliest occurrence of any of the events under sub-clauses (a) to (c) of Clause (3) of this Regulation, the generating company shall declare the date of commercial operation of the integrated mine(s) under the relevant sub-clause with one week prior intimation to the beneficiaries of the end-use or associated generating station(s);

Provided further that in case the integrated mine(s) is ready for commercial operation but is prevented from declaration of the date of commercial operation for reasons not attributable to the generating company or its suppliers or contractors or the Mine Developer and Operator, the Commission, on an application made by the generating company, may approve such other date as the date of commercial operation as may be considered appropriate after considering the relevant reasons that prevented the declaration of the date of commercial operation under any of the sub-clauses of Clause (3) of this Regulation;

Provided also that the generating company seeking the approval of the date of commercial operation under the preceding proviso shall give prior notice of one month to the beneficiaries of the end-use or associated generating station(s) of the integrated mine(s) regarding the date of commercial operation.”

16. The Petitioner has submitted that, as per the IA dated 12.2.2022, the transmission asset was scheduled to be commissioned by May 2023. The Petitioner has claimed the COD of the transmission asset as 11.10.2023 under Regulation 5(2) of the 2019 Tariff Regulations, as the associated downstream network being executed by CSPTCL is not ready.

17. The respondent, MSEDCL has contended that the associated 200 KV transmission line between Bhatapara (PG) – Bhatapara (CSPTCL) is not yet ready for commissioning as of the proposed COD, the concerned agency i.e., CSPTCL may be directed to bear the transmission charges for the period under consideration in the present Petition.

18. The respondent, MPPMCL has submitted that the associated 220 kV transmission line between Bhatapara (PG) – Bhatapara (CSPTCL) was not ready for commissioning as on the date of proposed COD. Although the ICT was energized, it did not provide any



service to the beneficiaries as no power flow has commenced through it for the associated transmission system. Therefore, the liability, if any, to pay transmission charges in respect of the aforesaid line bays covered under the instant Petition, before actual power flow through them should not be imposed on the beneficiaries, including MPPMCL.

19. We have considered the submissions of the MSEDCL and MPPMCL. The key question arises for our consideration is whether the COD of the instant transmission asset is approved under 5(2) of the 2019 Tariff Regulations or not?

20. It has been observed that as per the 3rd meeting of the Western Region Power Committee (Transmission Planning) [WRPC(TP)] held on 14.6.2021, the ICTs at Bhatpara (PG) Sub-station become “n-1”, non-compliant, when the total loading is above 420 MW due to high demand of Chhattisgarh and, therefore, to overcome the situation, “the Augmentation of 3rd 315 MVA, 400/220 kV ICT at Bhatapara (PG) with the LILO of one circuit of Bhatapara (PG)-Suhela 220 kV T/C line at Bhatapara (CSPTCL) to be implemented in same time frame” was agreed. The relevant extract of the Minutes of Meeting (MoM) is as under:

5.2 Operational Feedback of NLDC

The Operational feedback of NLDC for the period from October 2020 to December 2020 is as follows:

B. ICTs Constraints

Sl No.	ICT	Season/Antecedent Conditions	Description of the Constraints
11	2x315 MVA Bhatapara (PG) ICTs	Demand of Chhattisgarh above 4000 MW with 1900 MW drawal	Constraints: ICTs become “n-1” non-compliant when total loading is above 420 MW. For 10% of the time, ICTs were “n-1” non-compliant in Dec-2020. 3rd WRPC (TP): Augmentation of 3 rd 315 MVA, 400/220 kV ICT at Bhatapara (PG) with the LILO of



			one circuit of Bhatapara (PG) - Suhela 220 kV T/c line at Bhatapara (CSPTCL) to be implemented in same time frame is agreed.
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21. Accordingly, the augmentation scheme at Bhatapara (PG) along with LILO of one circuit of Bhatapara (PG)-Suhela 220 kV T/C line at Bhatapara (CSPTCL) was agreed in the 3rd WRPC(TP) held on 14.6.2021 and recommended in the 5th meeting of “National Committee of Transmission” held on 25.8.2021 and 2.9.2021 through VC for implementation of the transmission project through the RTM mode in the timeframe matching with the implementation of the LILO of one circuit of Bhatapara (PG)-Suhela 220 kV T/C line at Bhatapara (CSPTCL) under intra-State as recommended. The relevant extracts of the meeting are as under:

5.9. Augmentation of 1x500 MVA, 400/220 kV ICT at Bhatapara (PG)

5.9.1. CEA stated that the 3rd 400/220 kV ICT at Bhatapara has been agreed in the 3rd meeting of WRPC(TP) to overcome the operational constraint ('N-1' non-compliance) during the high electricity demand of Chhattisgarh. In addition to that, the loading on the Bhatapara (PG) – Bhatapara (CSPTCL) 220 kV S/ c line is high in present scenario even with the existing 2x315 MVA, 400/220 kV ICTs at Bhatpara(PG) substation. With additional ICT at Bhatpara(PG), the loading on Bhatapara (PG) – Bhatapara (CSPTCL) 220 kV S/c line would further increase. Therefore, LILO of one circuit of Bhatapara (PG) – Suhela 220 kV T/c line at Bhatapara (CSPTCL) has also been agreed to be implemented in matching time-frame of implementation of 1x500 MVA, 400/220 kV ICT at Bhatapara (PG) by CSPTCL as intra-state scheme.

5.9.2. NCT made the following recommendation:

S.no	Name of Scheme	Mode of implementation	Justification
1	Augmentation of 1x500 MVA, 400/220 kV ICT (3 rd) at Bhatapara (PG) Estimated cost: Rs 30 cr. Implementation timeframe: 15 months from date of issue of MoP OM	RTM	Remedial measure to overcome operational constraint ('N-1' non-compliance) of 400/220 ICTs at Bhatpara (PG) 400/220 kV substation. LILO of one circuit of Bhatapara (PG) – Suhela 220 kV T/c line at Bhatapara to be implemented by CSPTCL in matching time-frame of Bhatpara ICT.



Details of the scheme is given below:

Augmentation of 1x500 MVA, 400/220 kV ICT (3rd) at Bhatapara (PG)

S.no	Name of Scheme	Mode of implementation
1	Augmentation of 1x500 MVA, 400/220 kV ICT (3rd) at Bhatapara (PG)	400/220 kV, 500 MVA ICT –1 nos. 400 kV ICT bays – 1 nos. 220 kV ICT bays – 1 nos
Approximate Cost (Rs. Cr)		30

Note: To be implemented in the timeframe of implementation of LILO of one circuit of Bhatapara (PG) – Suhela 220 kV T/c line at Bhatapara (CSPTCL) under intra-state

22. Accordingly, the transmission project was allocated to the Petitioner, vide CTUIL OM dated 1.12.2021, for implementation in the timeframe of 15 months from the date of the issuance of the MoP OM or implementation of LILO of one circuit of Bhatapara (PG)-Suleha 220 kV T/C line at Bhatapara (CSPTCL) under intra-State, whichever is later.

23. Further, it has been observed that vide the email dated 16.12.2021, it was conveyed by the CTUIL to the Petitioner that the implementation of LILO line at Bhatapara line was dropped by CSPTCL and the modified scheme namely, Bhatapara (PG)-Bhatapara (CSPTCL) 220 kV D/C line was planned for commissioning by 31.12.2023 and, thus, it was requested that the implementation of the instant Augmentation scheme at Bhatapara (PG) Sub-station be matched with the implementation of the 220 kV D/C Bhatapara (PG)-Bhatapara (CSPTCL) transmission line which was expected by 31.12.2023.



From: Partha Sarathi Das (पार्थ सारथि दास)
Sent: Thursday, December 16, 2021 17:03
To: Manju Gupta (मंजू गुप्ता) <manju@powergrid.in>; Anoop Singh (अनूप सिंह) <anoops@powergrid.in>
Cc: P C Garg (पी.सी. गर्ग) <pcgarg@powergrid.in>; Rajesh Kumar (राजेश कुमार) <rajesh.kumar2@powergrid.in>; Ashok Pal (अशोक पाल) <ashok@powergrid.in>
Subject: Timeline for implementation of 3rd 400/220kV ICT at Bhatapara

Dear Sir,

Please refer to the letter dated 02.12.2021 regarding implementation of new Transmission Schemes under RTM wherein it was mentioned that the implementation time-frame of scheme mentioned at Sl. 2 of the letter (i.e. Bhatapara ICT Augmentation) shall be intimated separately. In this respect, it may be noted that as per the MoP OM, the ICT was to be implemented in **"15 months from date of issue of OM or implementation of LILO of one circuit of Bhatapara (PG) – Suhela 220 kV T/c line at Bhatapara (CSPTCL), whichever is later"**.

However, during the 2nd Joint Study Meeting on Transmission Planning for Western Region held on 10.12.2021 amongst CEA, CTU, WRPC, POSOCO and CSPTCL to discuss transmission network augmentation w.r.t. Chhattisgarh, it was intimated by CSPTCL that the above LILO line at Bhatapara is to be dropped and the modified scheme from Bhatapara S/s shall be **Bhatapara (PG) – Bhatapara (CSPTCL) 220 kV D/c line** which is planned for commissioning by 31.12.2023.

In view of the above, it is hereby intimated that **the implementation of 3rd 400/220kV ICT at Bhatapara(PG) may be matched with implementation of Bhatapara (PG) – Bhatapara (CSPTCL) 220 kV D/c line(under intra-State) , which is anticipated by 31.12.2023.**

Regards,
PSDas
Sr.GM
CTUIL

24. Subsequently, vide email dated 12.1.2022, CTUIL conveyed the decision to the Petitioner to prepone the implementation timeframe of the instant augmentation scheme, considering the preponement of the timeframe of the downstream element, i.e., 220 kV D/C Bhatapara (PG) - Bhatapara (CSPTCL) transmission line and Chhattisgarh requirement and requested to match the implementation of the instant augmentation scheme at Bhatapara (PG) Sub-station with the implementation of 220 kV D/C Bhatapara (PG) - Bhatapara (CSPTCL) transmission line, which was anticipated by 31.5.2023.



From: Anoop Singh {अनूप सिंह}
Sent: Wednesday, January 12, 2022 7:23 PM
To: Punam . {पूनम}; Ajit Kumar Singh {अजित कुमार सिंह}
Cc: Patanjali Sharma {पी. शर्मा}
Subject: Fwd: Timeline for implementation of 3rd 400/220kV ICT at Bhatapara

Sent from my iPhone

Begin forwarded message:

From: Partha Sarathi Das {पार्थ सारथि दास} <psdas@powergrid.in>
Date: 12 January 2022 at 6:03:34 PM IST
To: Anoop Singh {अनूप सिंह} <anoops@powergrid.in>, Rajil Srivastava {राजिल श्रीवास्तव} <rajil@powergrid.in>
Cc: "P C Garg {पी.सी. गर्ग}" <pcgarg@powergrid.in>, "A K Singhal {ए.के. सिंघल}" <singhal@powergrid.in>, Rajesh Kumar {राजेश कुमार} <rajesh.kumar2@powergrid.in>, Ashok Pai {अशोक पाल} <ashok@powergrid.in>, Manju Gupta {मंजू गुप्ता} <manju@powergrid.in>
Subject: RE: Timeline for implementation of 3rd 400/220kV ICT at Bhatapara

Sir,

Further to the trailing mail, it may be noted that a meeting was held on 05.01.2022 amongst CSPTCL, POSOCO, CEA, CTU wherein it was decided to prepone the implementation time frame of "Augmentation of 1x500 MVA, 400/220 kV ICTs at Bhatapara (PG) S/s" to May'23 (MoM attached), considering pre-ponement of time frame of the downstream element [Bhatapara(PG) – Bhatapara 220 kV D/c line] and Chattisgarh requirements.

In view of above, it is hereby intimated that the implementation of 3rd 400/220kV ICT at Bhatapara(PG) may be matched with implementation of Bhatapara (PG) – Bhatapara (CSPTCL) 220 kV D/c line (under intra-State) , which is anticipated by 31.05.2023.

Thanking You,
PSDas
Sr.GM
CTUIL



25. Therefore, in view of the above facts and decision taken in the various meetings, we are of the view that the transmission project of "Augmentation of 1x500 MVA, 400/220 kV (3rd ICT) at Bhatapara (PG) Sub-station" was mainly agreed for implementation through the RTM mode on account of non-compliance of "N-1" scheme during the high demand in Chhattisgarh and to overcome the operation constraints at Bhatapara (PG) Sub-station. Also, after perusal of the documents, it has been observed that the WRLDC Certificate dated 4.11.2023 has certified the successful completion of the trial-run (on load) on 10.10.2023. The Petitioner vide affidavit dated 24.2.2025 in compliance with the



RoP for the hearing dated 1.1.2025, has submitted that since commissioning, the ICT is under regular use and the power is flowing through the existing 220 kV downstream system.

26. Therefore, in view of the above facts, we are of the view that the main purpose for the implementation of the subject augmentation scheme was to overcome the operation constraints due to the non-compliance of the “N-1” scheme at Bhatapara (PG) Sub-station due to the high demand in Chhattisgarh, instead of the dedicated downstream network, i.e., 220 kV D/C Bhatapara (PG) to Bhatapara (CSPTCL) transmission line. Also, despite the non-commissioning of the downstream network, i.e., 200 kV D/C Bhatapara (PG) to Bhatapara (CSPTCL) transmission line, the 3rd ICT is in service and power is flowing through the existing 220 kV downstream network at Bhatapara Sub-station since commissioning. Accordingly, the COD of the instant transmission asset is not approved under 5(2) of the 2019 Tariff Regulations. Therefore, the contentions of the MSEDCL and MPPMCL is answered accordingly.

27. In view of the above and taking into consideration the CEA Energization Certificate dated 16.9.2023, WRLDC Certificate dated 4.11.2023 certifying the completion of trial run (on load) on 10.10.2023, and CMD Certificate, the COD of the transmission asset is approved as 11.10.2023 under Regulation 5(1) of the 2019 Tariff Regulations.

Capital Cost

28. 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."

29. The Petitioner has submitted the Auditor's Certificate dated 3.5.2024 and has claimed the capital cost incurred as on the COD and has projected the Additional Capital Expenditure (ACE) to be incurred, in respect of the transmission assets, and the same is as under:



(₹ in lakh)					
FR Apportioned Approved Cost	Cost as on COD	Projected ACE			Estimated Completion Cost
		2023-24	2024-25	2025-26	
3826.00	2813.92	183.08	403.49	71.51	3472.00

Cost Overrun

30. The Petitioner has submitted that the total estimated completion cost is within the apportioned approved cost as per the Feasibility Report (FR) and, thus, there is no cost overrun for the transmission asset with respect to the FR cost.

31. Further, the Petitioner has submitted the item-wise reasons for cost variation between the FR approved cost and the estimated completion cost, and the same are as under:

A. Sub-station equipment (Increase of ₹183 lakh):

32. For the procurement, an open competitive bidding route is followed by providing equal opportunity to all the eligible firms, the lowest possible market prices for required products/services are obtained, and the contracts are awarded based on the lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate, depending upon the prevailing market conditions. Further, regarding the variation in the cost of individual items in the Sub-station packages, the packages under the subject scope of works comprise a large number of items, which are awarded through open competitive bidding. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items under the said package. Further, the lowest bidder can be arrived at/ evaluated on an overall basis only. Hence, the item-wise unit prices in the contracts and their variation over the unit rate considered in the FR estimates are beyond the control of the Petitioner.



B. IDC (Decrease of ₹65 lakh):

33. The decrease in the IDC is attributable to the variation in the rate of interest considered in the FR versus Actuals, decrease in the overall capital cost with respect to the FR cost, and the deployment of the funds based on the actuals. It may be mentioned that in the FR cost, the IDC was calculated considering the interest rate @ 9.0 % of the domestic loans subject to the actuals. The actual IDC accrued up to the COD has been considered in the Auditor's Certificate.

C. IEDC (Decrease of ₹137 lakh):

34. In the IA, the IEDC and the contingency have been considered @10.75% and 3%, respectively, whereas, based on the actual expenditure under the subject head, IEDC has been considered in the Auditor's Certificate.

35. Further, in compliance with the Commission's query vide RoP dated 1.1.2025, the Petitioner vide affidavit dated 24.2.2025 has submitted that "the unit rates for ICTs are taken from SOR, (which has been prepared based on the average of unit rates of latest LOAs/Bids and/or from Raw Material prices) for prevailing price level while preparing the DPR. Considering the September 2021 price level based on the indices prevalent at that period, the estimated cost has been arrived. The envisaged cost was ₹3826 lakh, including an IDC of ₹145 lakh. Further, the estimated cost is based on the actual bill of quantity based on the detailed engineering and site requirements.

36. We have considered the Petitioner's submission and perused the documents placed on record. After perusal, it has been observed that the Petitioner vide letter dated 21.12.2022 has intimated to the contractual agency, i.e., M/s Toshiba Transmission &



Distribution System (India) Limited, Telangana that the 2nd Unit of ICT of TR34 Package which was awarded vide NOA No. 5002001872/Transformer/DOM/A03-CC-CS-4/NOA-I/NR1-150014 dated 28.1.2022, is required at Bhatapara Sub-station as per the project requirement and directed to coordinate for the dispatch accordingly.

37. In compliance with the RoP for the hearing dated 1.1.2025, the Petitioner, vide affidavit dated 24.2.2025, has submitted that based on the action plan and directions of MoP-Gol, the Petitioner explored the availability of transformers from the ongoing projects wherever the supply was offered by the manufacturer early with respect to the instant project execution timeline. Therefore, to complete the works and commission the ICT within the specified timeline as per the IA, the earlier awarded ICT was used through diversion from the other project of the Petitioner, which was having a supply schedule from January 2022.

38. Therefore, in view of the above, it is evident that the Petitioner has diverted the 2nd unit of ICT, which was awarded under TR34 Package vide supply order dated 28.1.2022 and installed as 3rd ICT at Bhatapara (PG) Sub-station to execute the work under the instant transmission project.

39. Further, it has been observed that the supply order dated 28.1.2022 for the supply of 4 Nos. 500 MVA, 400/220/33 kV ICT, 1 No. 80 MVAR, 765 kV Spare Reactor and other equipments was awarded by the Petitioner at the cost of ₹9257.90 lakh (exclusive of GST) (Approximately ₹7214.41 lakh for 4 Nos. ICT and ₹2043.49 lakh for Reactor & other equipment's), and approximately ₹1803.60 lakh (exclusive GST) for 01 No. ICT. However, as per Form-5A, submitted by the Petitioner, the work for "supply of 400/220 kV Auto



Transformer at Bhatapara Sub-station” was awarded at the cost of ₹1695.19 lakh. Therefore, the Petitioner is directed to submit the justification for the aforementioned discrepancy to review the same at the time of truing up. The Petitioner is also directed to submit the details of the variation in the estimated completion cost vis-à-vis the awarded cost in respect of the transmission asset, along with the supporting documents, to review the same at the time of truing up.

40. Since the estimated completion cost of ₹3472.00 lakh is within the FR approved cost of ₹3826.05 lakh, there is no cost overrun in respect of the transmission asset.

Time Overrun

41. The Petitioner has submitted that, as per the IA, the transmission asset was scheduled to be commissioned by May 2023. Against that, the COD of the transmission asset has been claimed as 11.10.2023 with a time overrun of 5 months and 10 days.

42. The Petitioner in the instant Petition and further vide affidavits dated 7.5.2024 and 24.2.2025 has submitted the detailed justification for the delay in commissioning of the transmission asset, and the same are as under:

A. Delay due to the Supply of Semiconductors, Control and Relay (C&R) Panels and relay panels:

43. The supply of C&R Panels and Relays was severely affected due to the shortage of Semiconductors worldwide in the year 2022 till early 2023. Relay Panels could only be supplied by March/April 2023. This has affected the progress of work at the Bhatapara site. Further, the supply of C&R panels was scheduled from January 2023 to March 2023. However, due to the shortage of semiconductors worldwide, the C&R panels could not



be manufactured within the scheduled timeline, which affected the overall scheduled commissioning time of the transmission asset. The actual supply of the C&R panels started from April 2023.

B. Delay due to Heavy Rainfall, Civil, Erection and Commissioning activities:

44. Due to heavy rains and flood-like situations from July 2022 to October 2022, the construction site was flooded, and movement of T&P's were restricted, due to which the progress of civil works was affected. Further, roads were blocked due to the submergence of the bridges, which prevented construction materials from being supplied to the site. Further, the Civil works and erection of equipment are the progressive activities at the site scheduled as per the stage-by-stage planning of equipment erection. The same was planned from May 2022 to May 2023. However, due to the exceptional conditions of the heavy rainfall and flood-like situations from July 2022 to October 2022, the planning of the erection of equipment was significantly hampered and this has affected the overall scheduled commissioning time of the transmission asset.

45. The Petitioner has also submitted the rainfall data of the IMD department and contended that the works related to the transmission asset, particularly, the civil works, were affected largely due to heavy rains as compared to the LPA of the region, which was an uncontrollable part of the Petitioner. Further, there were thunderstorms accompanied by lightening, which are not desirable to carry out the works in the charged premises of the Sub-station. The IMD data as submitted by the Petitioner is as under:



JUL		AUG		SEPT		OCT	
R/F	%DEP	R/F	%DEP	R/F	%DEP	R/F	%DEP
423.0	19	358.3	12	72.2	-61	1.7	-96
226.2	-32	317.1	10	331.1	91	49.3	3
307.4	-7	434.8	51	103.7	-40	43.1	-10
287.2	-13	133.9	-54	242.3	40	35.3	-26
410.0	26%	452.2	57%	156.1	-9%	62.6	53%

It is relevant to mention here that the IMD defines the normal rainfall as LPA i.e. Long Period Averages while computing the % excess/ low/ departure. The LPA as defined is Long Period Average (LPA) is the averages of rainfall received over a long period between 1951 and 2001 and for longer /lesser period wherever available based on starting date of record keeping.

C. Delay due to Encountering of Heavy rocks, Excavation and other Civil Works:

46. The civil works were scheduled from May 2022 to April 2023, and during excavation, 30% hard rock by volume was encountered, which was required to be broken by the use of T&Ps, as blasting may have caused damage/tripping of nearby charged equipment. Hard rock was cut by using a rock breaker, which delayed the excavation works, thus adversely affecting the civil progress. The Petitioner has further submitted that the civil works were scheduled from May 2022 to April 2023, and for the aforementioned reason, the Petitioner faced hardship in executing the civil works as envisaged, particularly in March 2023 and April 2023, which affected the overall scheduled commissioning time of the transmission asset.

47. MPPMCL, in its reply vide affidavit dated 16.1.2025, has submitted as under:



- a) The IA was accorded in February 2022 by the Management of the Petitioner, and the Petitioner must be aware of the shortage of semiconductors worldwide in 2022, and knowing that fact, must have assessed an achievable implementation schedule for the works covered in the instant Petition. Therefore, this contention is not justified.
- b) As per the information available on the internet, in 2023, Raipur (the nearest large city and capital of Chhattisgarh) received its first spell of monsoon showers on June 24, a week after the expected date. Pertinently, the transmission project was scheduled to be commissioned by May 2023, whereas rains came in the last week of June 2023. Therefore, this contention is not plausible.
- c) The civil excavation work was to be carried out in an existing Sub-station of the Petitioner and not in any new location. So, the Petitioner must be aware of the strata of the location in advance. Therefore, this contention is also not justified.
- d) The transmission project was awarded to the Petitioner in December 2021. The Petitioner had ample time to plan and implement the transmission project to adhere to the SCOD of May 2023.

48. MPPMCL has further submitted that the Petitioner has failed to substantiate its contentions with relevant documentation, such as procurement orders, expected delivery timelines, follow-up correspondences for timely delivery, etc., reports or certifications from the weather department or any other authoritative source, etc. In the absence of such



documents, the reasons for condoning delays remain unsubstantiated and cannot be considered effective. The said contentions lack merit and should not be accepted.

49. MSEDCL, in its reply vide affidavit dated 10.1.2025, has submitted that the Petitioner has failed to provide any satisfactory justification for the delay in completing the transmission project, and neither had sought any extension for the same, prior in time. The transmission project was awarded to the Petitioner in December 2021, thereby granting the Petitioner ample time to plan and implement the said project in adherence to the SCOD of May 2023. Further, the Petitioner has attributed the delay to the inability to transport the construction materials to the project site during the monsoon season. Such constraints due to the monsoon are evidently foreseeable and, therefore, under the basic concept of the reasonable and legitimate expectation, the same should be treated as having been adequately anticipated and to be factored into the period of the implementation of the transmission project. The lackadaisical approach of the Petitioner to planning has caused the said delay. Hence, the claim of the Petitioner for the delay in commissioning of the transmission asset cannot be allowed and, thus, deserves to be rejected at the threshold, particularly owing to the inefficiency in completing the project despite being well aware of the monsoon period in the interregnum, which is nothing but an inefficient planning of the project.

50. The Petitioner in its rejoinder to the reply of MPPMCL and MSEDCL, vide separate affidavits dated 21.2.2025 has reiterated its submissions and the justification for time overrun in commissioning of the transmission asset and further submitted that the time incurred beyond the SCOD in the instant case qualifies as an “uncontrollable factor” and



a case of “force majeure” under Regulation 21 of the 2019 Tariff Regulations, and accordingly requested to condoned the time overrun.

Analysis and Decision

51. We have considered the Petitioner’s, MPPMCL’s and MSEDCL’s submissions and have gone through the documents placed on record. It has been observed that the instant transmission project was allotted to the Petitioner vide CTUIL OM dated 2.12.2021 under RTM mode with implementation time frame of 15 months from the date of issue of the MoP OM dated 1.12.2021 or implementation of LILO of one circuit of Bhatapara (PG)-Suhela 220 kV T/C Line at Bhatapara (CSPTCL) under intra-State, whichever is later. However, as per the CTUIL office correspondence/email dated 16.12.2021 and 12.1.2022, the earlier envisaged LILO line at Bhatapara (PG) was dropped and the modified scheme from Bhatapara Sub-station will be Bhatapara (PG)-Bhatapara (CSPTCL) 220 kV D/C Line, and accordingly, the implementation time frame of the transmission asset was preponed to May 2023. The IA dated 12.2.2022 was accorded by the competent authority of the Petitioners’ company, considering the transmission asset’s SCOD by May 2023 or matching with LILO of one circuit of Bhatapara (PG) – Suhela 220 kV Transmission line at Bhatapara (CSPTCL) under intra-State, whichever is later.

52. We are of the view that the aforementioned LILO scheme had been dropped and intimated by the CTUIL to the Petitioner vide email dated 16.12.2021 and 12.1.2022, i.e., well before the IA dated 12.2.2022. The Petitioner is directed to submit the justification for considering the scheduled completion of the transmission asset matching with the



LILO of one circuit of Bhatapara (PG) – Suhela 220 kV transmission line at Bhatapara (CSPTCL) under intra-State at the time of truing up.

53. Further, as per the CTUIL's email dated 16.12.2021 and 12.1.2022, the implementation time frame of the "*Augmentation of 1x500 MVA, 400/220 kV ICT at Bhatapara (PG) Sub-station*" was preponed to May 2023 and therefore, the SCOD of the transmission asset is being considered as on 31.5.2023 for the analysis of the time overrun in the instant order. Therefore, the details of the SCOD, COD (proposed), and time overrun in respect of the transmission asset is as under:

Asset Name	SCOD	COD under Regulation 5(2) of 2019 Tariff Regulation	Time Overrun
1x500 MVA, 400/220 kV ICT (3 rd) along with Associated Bays at Bhatapara Substation	31.5.2023	11.10.2023	133 days

54. The Petitioner has submitted the detailed justification and contended that the transmission project was delayed mainly due to a delay in the supply of the C&R Panel on account of the shortage of semiconductors, heavy rainfall and encountering of heavy rocks during excavation. The detailed reasons submitted by the Petitioner for the time overrun have been analyzed as under:

A. Delay due to the Supply of C&R Panels and Relays

55. The Petitioner has mainly contended that the supply of C&R Panels got delayed due to the shortage of semiconductors worldwide in the year 2022 till early 2023. The C&R Panels were scheduled to be supplied from January 2023 to March 2023. However, due to the shortage of semiconductors worldwide, the C&R Panels could not be manufactured and supplied within the scheduled timeline, which affected the overall



commissioning time of the transmission asset. The actual supply of C&R Panels started from April 2023.

56. We have considered the Petitioner's submissions and have gone through the documents placed on record. It has been observed that the Petitioner has submitted the newspaper clippings regarding the global shortage of semiconductor chips. However, these documents are general in nature and do not specifically pertain to the delay in the supply of the materials for the instant transmission asset. The Petitioner has not provided any specific evidence to substantiate the claim that the delay in the supply of the C&R Panel was due to the global semiconductor chip shortage. Further, no documents have been submitted from the contractual side indicating any request or intimation of delay in the supply of the aforementioned panels on account of the semiconductor shortage.

57. Accordingly, the Petitioner's contention in respect of time overrun on account of the shortage of the Semiconductors worldwide has no merit and, hence, is rejected. Further, the Petitioner is directed to submit the details of the dates on which the approvals for the C&R Panels were accorded, and the dates on which these panels were received at site with specific time overrun, if any, and how the shortage of the semiconductors specifically affected the supply of said C&R Panels, for review at the time of truing-up.

B. Delay due to Heavy rainfall.

58. The Petitioner has submitted that the civil, erection and construction activities were affected and delayed due to heavy rainfall and a flood-like situation from July 2022 to October 2022. The Petitioner has also submitted the IMD data of rainfall in support of the delay in the execution activities due to the heavy rainfall. The Petitioner has further



submitted that due to the heavy rainfall exceeding the LPA of the region, the works, particularly civil activities, were significantly affected, being beyond the Petitioner's control.

59. We have considered the Petitioner's submissions and have gone through the documents placed on record. The Petitioner has submitted the IMD data of the rainfall and contended that the unprecedented and continuous rainfall, as compared to the LPA during the period from July 2022 to October 2022, affected the execution of the civil works.

60. Regulation 3(25) of the 2019 Tariff Regulations defines "*Force majeure*" as under:

"(25) 'Force Majeure' for the purpose of these regulations means the events or circumstances or combination of events or circumstances including those stated below which partly or fully prevents the generating company or transmission licensee to complete the project within the time specified in the Investment Approval, and only if such events or circumstances are not within the control of the generating company or transmission licensee and could not have been avoided, had the generating company or transmission licensee taken reasonable care or complied with prudent utility practices:

(a) Act of God including lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, geological surprises, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred years; or

....."

61. As per Regulation 3(25) of the 2019 Tariff Regulations, the Petitioner is required to submit the data for the past one hundred years to substantiate the claim that the rainfall during the relevant period was abnormal. In this regard, the Petitioner has submitted Long Period Average (LPA) data sourced from the website of the IMD. However, since LPA represents the average rainfall received over a 50-year period (1951–2001), it shows that the rainfall received district-wise, and it does not support that the excessive rainfall has



affected the works of the Petitioner. Also, all the activities were planned by the Petitioner keeping in view the various seasons, including the monsoon season.

62. Therefore, we are unable to accept the Petitioner's claim that the rainfall during the stated period was abnormal, or that it constituted a force majeure event affecting the execution of the transmission asset in terms of Regulation 3(25) of the 2019 Tariff Regulations. Accordingly, the Petitioners' contention regarding time overrun in execution of the civil and other erection activities on account of the excess rainfall is, hereby, not accepted.

C. Delay due to the encountered heavy rocks, execution and other civil works got delayed.

63. The Petitioner has submitted that 30% hard rock by volume has been encountered during the civil construction activities, which hampered the progress of work, especially in March and April 2023, as hard rock was cut by using a rock breaker instead of blasting to avoid the trippings/damages of nearby charged equipments.

64. We have considered the Petitioner's submissions and have gone through the documents placed on record. It has been observed that the Petitioner, in support of the time overrun due to the aforementioned reason, has submitted the photographs of the excavation of the civil works. Further, as per Form-12, submitted by the Petitioner, it has been observed that the Petitioner has considered the total time of 340 days from 25.5.2022 to 30.4.2023 against the civil works in the original time schedule, whereas the same has been completed within 295 days from 29.7.2022 to 20.5.2023, i.e., earlier in comparison to the time considered in the original schedule. Therefore, it is contradictory



to the claim of the Petitioner that the progress of civil works was hampered and delayed due to excavation using a rock breaker instead of blasting.

65. Further, Regulation 22 of the 2019 Tariff Regulations provides as under:

“22 Controllable and Uncontrollable Factors: The Following shall be considered as Controllable and Uncontrollable factor for deciding time overrun, 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 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.”***

66. As per Regulation 22(1)(b) of the 2019 Tariff Regulations, any kind of delay in execution of the transmission project on account of the contractor falls under the category of a controllable factor. Further, the work was undertaken at the existing Sub-station of the Petitioner, and, thus, the contention of the Petitioner for the time overrun on account of encountering heavy rocks cannot be accepted.

67. The summary of SCOD, COD, time overrun claimed, time overrun condoned/not condoned are as under:

Name of Asset	SCOD	COD (Proposed)	Time Overrun Claimed	Time Overrun Condoned	Time Overrun not Condoned
01 No 400/220KV, 500 MVA ICT (3 rd) at Bhatapara (PG) along with ICT bays	31.5.2023	11.10.2023	133 days	NIL	133 days



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

68. The Petitioner has claimed the IDC of ₹79.79 lakh for the transmission asset, out of which ₹68.05 lakh was discharged up to the COD, ₹7.93 lakh in 2023-24 and ₹3.81 lakh in 2024-25.

69. MPPMCL has submitted that the IDC and IEDC may be restricted to the permissible limit up to the SCOD only, after a prudence check.

70. In response, the Petitioner has submitted that, keeping in view the delay justification and considering the delay reasons as uncontrollable factors and a case of “force majeure” under Regulation 21 of the 2019 Tariff Regulations, IDC and IEDC may be allowed to be capitalized till the actual commissioning of the transmission asset.

71. We have considered the Petitioner’s and MPPMCL’s submissions. As the time overrun in case of the transmission asset is not condoned, the IDC claimed by the Petitioner for the period beyond the SCOD has been disallowed.

72. The allowable IDC has been worked out considering the information submitted by the Petitioner for the transmission assets on a cash basis. The loan details submitted in Form-9C for the 2019-24 tariff period and IDC computation provided by the Petitioner have been considered for the purpose of IDC calculation on cash and on an accrued basis. Therefore, the total amount of IDC allowed for the transmission asset is as under:

(₹ in lakh)		
IDC claimed	IDC disallowed due to the delay not condoned	IDC allowed
79.79	46.86	32.93



73. The Petitioner has claimed the IEDC of ₹208.41 lakh for the transmission asset as per the Auditor's Certificate, which has been discharged up to the COD. The allowable IEDC has been worked out on a proportionate basis as the complete time overrun that has not been condoned for the transmission asset. Accordingly, the details of the IEDC allowed and disallowed are as under:

(₹ in lakh)		
IEDC Claimed	IEDC Disallowed due to time overrun not condoned	IEDC Allowed
208.41	45.74	162.67

Initial Spares

74. Regulation 23(d) of the 2019 Tariff Regulations provides that the Initial Spares will be capitalized 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) GIS Insulated Sub-station	
- (Green Field):	5.00%
- (Brown Field):	7.00%
(v) Communication System:	3.50%
(vi) Static Synchronous Compensator:	6.00%

75. Initial Spares as claimed by the Petitioner are as under:

(₹ in lakh)					
Particulars	Plant & Machinery cost (A)	Initial Spares Claimed (B)	Ceiling Limit (in %) (C)	Initial Spares Worked out $D = [(A-B)*C / (100-C)]$	Excess Spares
Sub-station (AIS-Brown field)	3163.80	120.65	6%	194.24	Nil



76. The Petitioner has further submitted that the Initial Spares claimed for the transmission asset are within the ceiling limit as specified in the 2019 Tariff Regulations.

77. We have considered the Petitioner's submissions. As per Regulation 23(d) of the 2019 Tariff Regulations, the Initial Spares are worked out and allowed as under, subject to truing up:

(₹ in lakh)					
Plant and Machinery cost for calculation of Initial Spares	Initial Spares claimed	Norm as per Regulations (in %)	Initial Spares allowable	Excess Initial Spares	Initial Spares allowed
(A)	(B)	(C)	$(D)=(A-B)/(100-C)*C$	(E)	(F)=(B-E)
3163.80	120.65	6%	194.24	Nil	120.65

Capital Cost Allowed as on the COD

78. Accordingly, the capital cost allowed in respect of the transmission assets as on the COD, excluding the IDC and IEDC disallowed on account of the non-condonation of the time overrun, is as under:

(₹ in lakh)			
Capital Cost claimed till COD	Less: IDC disallowed due to time overrun	Less: IEDC disallowed due to time overrun	Capital Cost as on COD
2813.92	46.86	45.74	2721.32

Additional Capital Expenditure ("ACE")

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

"24. Additional Capitalization 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:

- Un discharged liabilities recognized to be payable at a future date;*
- Works deferred for execution;*
- 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; and
- e. Change in law or compliance of any existing law; and
- f. Force Majeure events;

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

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

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

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

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

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

- a. The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations.
- b. The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
- c. The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
- d. The replacement of such asset or equipment has otherwise been allowed by the Commission.”

80. The Petitioner has claimed the ACE against the transmission asset as under:

(₹ in lakh)		
Projected ACE		
2023-24	2024-25	2025-26
183.08	403.49	71.51



81. The Petitioner has also submitted that the ACE incurred/projected to be incurred in the contextual assets is mainly on account of the balance/retention payments. Further, the liability flow statement submitted by the Petitioner is as under:

(₹ in lakh)

Party Name	Particulars (TL/SS)	Outstanding Liability as on COD	Discharge		Liability Reversal		Additional Liability Recognized	
			2023-24	Total (2019-24)	2023-24	Total (2019-24)	2023-24	Total (2019-24)
M/s Hartek Power Pvt. Ltd.	SS	89.97	0.00	0.00	0.00	0.00	16.52	16.52
M/s Hartek Power Pvt. Ltd.	SS	135.22	0.00	0.00	0.00	0.00	33.45	33.45
M/s Hartek Power Pvt. Ltd.	IT	0.01	0.00	0.00	0.00	0.00	0.00	0.00
M/s Toshiba T&D Systems Pvt. Ltd.	SS	223.06	108.75	108.75	105.30	105.30	24.36	24.36
Total		448.26	108.75	108.75	105.30	105.30	74.33	74.33

(₹ in lakh)

Party Name	Particulars (TL/SS)	Outstanding Liability as on COD	Discharge			Additional Liability Recognized		
			2024-25	2025-26	Total (2025-29)	2024-25	2025-26	Total (2025-29)
M/s Hartek Power Pvt. Ltd.	SS	89.97	87.47	2.5	89.97	66	30.36	96.36
M/s Hartek Power Pvt. Ltd.	SS	135.22	133.38	1.84	135.22	23.66	21.82	45.48
M/s Hartek Power Pvt. Ltd.	IT	0.01	0.01	0	0.01	1.66	0	1.66
M/s Toshiba T&D Systems Pvt. Ltd.	SS	9.01	9.01	0	9.01	0	0	0
M/s Toshiba T&D Systems Pvt. Ltd.	SS	0	0	0	0	77.3	0	77.3
Misc Civil Works	Civil	0	0	0	0	5	15	20
Total		234.21	229.87	4.34	234.21	173.62	67.18	240.8

82. The Petitioner has submitted that the admissibility of ACE after the COD may be dealt with in accordance with Regulation 24 of the 2019 Tariff Regulations.



83. It has been observed that the Petitioner has also claimed the ACE in the 2024-25 and 2025-26 for the transmission asset, which shall be dealt with in the 2024-29 tariff period as per the applicable tariff regulations.

84. We have considered the Petitioner's submissions, and it has been observed that the Petitioner has depicted the "*Reversal of liability of ₹105.30 lakh*" during FY 2023-24 in the detailed liability flow statement. However, the same has not been encountered in the Auditor's Certificate dated 3.5.2024, which depicts the net expenditure of ₹183.08 lakh from 11.10.2023 to 31.3.2024.

85. Therefore, provisionally, we have allowed the ACE of ₹183.08 lakh claimed by the Petitioner as per the Auditor's Certificate dated 3.5.2024, subject to the submission of the detailed justification for the aforementioned discrepancy between the Liability Flow Statement and Auditor's Certificate at the time of truing up to review the same.

86. Therefore, the ACE claimed on account of the balance and retention payments is allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. ACE allowed for the 2019-24 tariff period for the transmission asset is as under:

(₹ in lakh)		
Particulars	Regulations	ACE allowed (2023-24)
Balance and Retention Payments other than IDC	Regulation 24(1)(a) of the 2019 Tariff Regulations	108.75
Addition in Gross Block	Regulation 24(1)(b) of the 2019 Tariff Regulations	74.33
Total		183.08

87. Accordingly, the capital cost allowed as on 31.3.2024 is as under:



(₹ in lakh)		
Capital Cost allowed as on COD	ACE Allowed	Capital Cost as on 31.3.2024
	2023-24	
2721.32	183.08	2904.40

Debt Equity Ratio

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

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

Provided that:

- where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff;
- the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment;
- 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.”

89. The debt-equity ratio considered for the purpose of computation of the tariff for the 2019-24 period for the transmission asset is as under:

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	1904.93	70	128.16	70	2033.08	70
Equity	816.40	30	54.92	30	871.32	30
Total	2721.32	100	183.08	100	2904.40	100

Depreciation

90. 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 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.”

91. The depreciation has been worked out considering the admitted capital expenditure as on the COD and, thereafter, up to 31.3.2024. The Weighted Average Rate of Depreciation (WAROD) placed at Annexure has been worked out for the transmission asset as per the rates of depreciation specified in the 2019 Tariff Regulations. The depreciation allowed in respect of the transmission asset for the 2019-24 tariff period is as under:

		(₹ in lakh)
	Particulars	2023-24 (pro rata for 173 days)
A	Opening Gross Block	2721.32
B	Addition, during the year 2019-24 due to projected ACE	183.08
C	Closing Gross Block (A+B)	2904.40
D	Average Gross Block (A+C)/2	2812.86
E	Average Gross Block (90% depreciable assets)	2769.75
F	Average Gross Block (100% depreciable assets)	43.11
G	Depreciable value (excluding IT equipment and software) (E*90%)	2492.78
H	Depreciable value of IT equipment and software (F*100%)	43.11
I	Total Depreciable Value (G+H)	2535.89
J	Weighted average rate of Depreciation (WAROD) (in %)	5.43%
K	Lapsed useful life at the beginning of the year (Year)	0
L	Balance useful life at the beginning of the year (Year)	25
M	Depreciation during the year (D*J)	72.18
N	Cumulative Depreciation at the end of the year	72.18
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	2463.71



Interest on Loan (“IoL”)

92. 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 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”.

93. The weighted average rate of IoL has been considered as claimed by the Petitioner. 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 will be adjusted.



Accordingly, the floating rate of interest, if any, shall be considered at the time of trueing-up.

94. IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL allowed for the transmission asset is as under:

		(₹ in lakh)
	Particulars	2023-24 (pro rata for 173 days)
A	Gross Normative Loan	1904.93
B	Cumulative Repayments up to the Previous Year	0.00
C	Net Loan-Opening (A-B)	1904.93
D	Addition, due to ACE	128.16
E	Repayment during the year	72.18
F	Net Loan-Closing (C+D-E)	1960.90
G	Average Loan (C+F)/2	1932.91
H	Weighted Average Rate of Interest on Loan (in %)	7.82
I	Interest on Loan (G*H)	71.47

Return on Equity ("RoE")

95. Regulation 30 and Regulation 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 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:

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

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

Illustration-

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

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



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

- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
- (b) Estimated Advance Tax for the year on above is Rs 240 crore;
- (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;
- (d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”

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

(₹ in lakh)		
	Particulars	2023-24 (pro rata for 173 days)
A	Opening Equity	816.40
B	Addition due to ACE	54.92
C	Closing Equity (A+B)	871.32
D	Average Equity (A+C)/2	843.86
E	Return on Equity (Base Rate) (in %)	15.50
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)	74.91

Operation & Maintenance Expenses (“O&M Expenses”)

97. The Petitioner has claimed the O&M Expenses for the transmission asset as under:



(₹ in lakh)

Particulars	2023-24 (pro rata for 173 days)
O&M Expenses	126.80

98. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as under:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.26	0.27	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1666	1725	1785	1848	1913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2252	2331	2413	2498	2586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2468	2555	2645	2738	2834



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1696	1756	1817	1881	1947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2563	2653	2746	2842	2942

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."

99. The O&M Expenses are approved for the transmission asset in accordance with Regulation 35(3)(a) of the 2019 Tariff Regulations as under:



(₹ in lakh)	
Particulars	2023-24 (pro-rata for 173 days)
Sub-station: 1 No. 400 kV ICT (3rd) Bay	
Norms as per Regulation (₹ per Bay)	36.91
O&M Expenses	17.45
Substation: 1 No. 220 kV ICT (3rd) Bay	
Norms as per Regulation (₹ per Bay)	25.84
O&M Expenses	12.21
Sub-station: 1 No., 500 MVA, 400/220 kV ICT (3rd)	
Norms as per Regulation (₹ per MVA)	0.411
O&M Expenses	97.14
Total O&M Expenses	126.80

Interest on Working Capital (“IWC”)

100. Regulation 34(1)(c), Regulation 34(3), Regulation 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;”*



101. The Petitioner has considered the rate of IWC as 12.00% as on 1.4.2023. 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 are as under:

(₹ in lakh)	
Particulars	2023-24 (pro rata for 173 days)
Working Capital for O&M Expenses (O&M Expenses for one month)	22.35
Working Capital for Maintenance Spares (15% of O&M Expenses)	40.24
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	92.12
Total Working Capital	154.71
Rate of Interest for working capital (in %)	12.00
Interest on working capital	8.78

Annual Fixed Charges for 2019-24 Tariff Period

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

(₹ in lakh)	
Particulars	2023-24 (pro rata for 173 days)
Depreciation	72.18
Interest on Loan	71.47
Return on Equity	74.91
O&M Expenses	126.80
Interest on Working Capital	8.78
Total	354.13

Filing Fee and Publication Expenses

103. The Petitioner has sought reimbursement of the fee paid by it for filing the instant Petition and the publication expenses. The Petitioner shall be entitled to reimbursement of the filing fees and publication expenses in connection with the present petition, directly



from the beneficiaries on a pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

License Fee and RLDC Fees and Charges

104. The Petitioner shall be entitled to reimbursement of the licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations or the 2019-24 tariff period and also for the recovery of the 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

105. 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 will be borne and additionally paid by the Respondent(s) to the Petitioner, and the same will be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/Statutory Authorities, and the same may be allowed to be recovered from the beneficiaries.

106. MPPMCL and MSEDCL have submitted that the transmission lines are exempted from the implication of the GST and related taxes with effect from 1.7.2017. Therefore, the Petitioner's prayer is premature, and the same may not be allowed.

107. In response, the Petitioner has reiterated its submissions.

108. We have considered the Petitioner's, MPPMCL's and MSEDCL'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

109. 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 consequential IWC.

110. We have considered the Petitioner's submissions. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it 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 said Petition has already been disposed of by the Commission vide order dated 3.8.2021. Therefore, the Petitioner's prayer in the instant Petition for allowing it to file a separate Petition for claiming overall security expenses and consequential IWC has become infructuous.

Capital Spares

111. 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

112. The Petitioner has submitted that the transmission charges for the 2019-24 period shall be recovered on a monthly basis in accordance with Regulation 57 of the 2019 Tariff Regulations and as per the 2020 Sharing Regulations as amended from time to time.

113. MPPMCL has submitted that the absence of established power flow confirms that the project covered under the instant Petition was not operational, evidently, the



transmission service was not provided, and the project was not available for use by the beneficiaries. Therefore, under no circumstances should the beneficiaries, including MPPMCL, be made liable to bear the transmission charges of the ICT and associated bays covered under the Petition prior to the actual power flow in the associated transmission line. MPPMCL has relied upon the Hon'ble Supreme Court's judgement dated 3.3.2016 in "*Civil Appeal No. 9193 of 2012, in the case of PGCIL vs. PSPCL & Ors., reported as (2016) 4 SCC 797*", wherein the Hon'ble Supreme Court, inter alia, held that the COD of the transmission lines can be achieved only on the fulfilment of certain conditions. The said judgment dated 3.3.2016 upheld the principle that the operational readiness of the transmission element, evidenced by actual power flow, is a prerequisite for imposing tariff liabilities on the beneficiaries. Therefore, the liability to pay transmission charges for such period under the guise of the COD would be contrary to the law as settled by the Hon'ble Supreme Court and cannot be fastened to the beneficiaries. Accordingly, the liability of transmission charges, before actual power flow, should not be imposed on the beneficiaries, including MPPMCL.

114. We have considered the Petitioner's and MPPMCL's submissions. Regulation 7 of (Sharing of interstate transmission Charges and losses) Regulations, 2020 provides as follows:

"7. Components and sharing of Transformer Component (TC)

(1) Transformer Component for a State shall comprise of Yearly Transmission Charges for inter-connecting transformers (ICTs) planned for drawal of power by the concerned State. A list of such transformers for each State shall be provided by the Central Transmission Utility to the Implementing Agency.

Provided that where the Yearly Transmission Charges of ICTs for a State are not available, the Yearly Transmission Charges for such transformers shall be worked out and provided by the Central Transmission Utility, apportioning Yearly Transmission Charges approved by



the Commission for the integrated project, based on indicative capital cost. For transformers used for drawl requirement of more than one State, Yearly Transmission Charges shall be apportioned to such States in the ratio of number of feeders from such transformers for each State.

(2) Transformer Component for a State shall be borne and shared by the drawee DICs located in the concerned State in proportion to their Long-Term Access and Medium-Term Open Access.”

115. As the said transmission asset was implemented to overcome the Operation Constraints due to non-compliance of “N-1” Scheme at Bhatapara (PG) substation due to high demand of Chhattisgarh and the COD of the transmission asset has been approved as 11.10.2023 under Regulation 5(1) of the 2019 Tariff Regulations, the Annual fixed charges determined for 2019-24 Tariff Period shall be shared as per Regulation 7 of CERC (Sharing of interstate transmission Charges and losses) Regulations, 2020 and subsequent amendments. Accordingly, the transmission charges of instant transmission asset shall be borne by drawee DIC’s of Chhattisgarh. Thus, there is no substance in the contention of MPPMCL, and the same is accordingly rejected.

116. The COD of the transmission asset has been approved as 11.10.2023 under Regulation 5(1) of the 2019 Tariff Regulations at para 24, the AFC determined for the 2019-24 tariff period shall be recovered in terms of Regulation 5 to 8 of the 2020 Sharing Regulations and its amendments from time to time.

Interim Tariff

117. The Petitioner has prayed to allow an interim tariff, in accordance with Regulation 10(3) of the 2019 Tariff Regulations, to be included in the Point-of-Connection charges.



118. We have considered the Petitioner's submissions. Since we have determined the transmission tariff in respect of the transmission asset in this order, the prayer for the interim tariff becomes redundant. Therefore, we have not considered it in this order.

119. To summarise, the AFC allowed with respect to the transmission asset for the 2019-24 tariff period in this order are as under:

(₹ in lakh)	
Particulars	2023-24 (pro rata for 173 days)
AFC Claimed	360.82
AFC Allowed	354.13

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

121. This order disposes of Petition No. 127/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)

Capex	Admitted Capital Cost as on COD	Projected ACE			Admitted Capital Cost as on 31.3.2024	Depreciation Rate (in %)	Annual Depreciation		
		2021-22	2022-23	2023-24			2021-22	2022-23	2023-24
Building	0.00	0.00	0.00	0.00	0.00	3.34	0.00	0.00	0.00
Transmission Line	0.00	0.00	0.00	0.00	0.00	5.28		0.00	0.00
Sub-station	2678.21	0.00	0.00	183.08	2861.93	5.28	0.00	0.00	146.24
PLCC	0.00	0.00	0.00	0.00	0.00	6.33	0.00	0.00	0.00
IT Equipment	43.11	0.00	0.00	0.00	43.11	15.00	0.00	0.00	6.47
Total	2721.32	0.00	0.00	183.08	2904.40		0.00	0.00	152.71
Average Gross Block							0.00	0.00	2812.86
WAROD (in %)							0.00	0.00	5.43

