

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 85/TT/2024

Coram:

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

Date of Order: 21.02.2025

In the matter of:

Approval of 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 03 Nos. Assets under "Augmentation of Transformation Capacity" in the Southern Region.

And in the matter of:

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

...Petitioner

Vs.

1. Tamil Nadu Generation and Distribution Corporation Limited,
NPKRR Maaligai, 800, Anna Salai, Chennai-600002.
2. Kerala State Electricity Board Limited,
Vaidyuthi Bhavanam,
Pattom, Thiruvananthapuram-695004.
3. Electricity Department,
Government of Goa,
Vidyuti Bhawan, Panaji, Goa-403001.
4. Electricity Department,
Government of Pondicherry,
Pondicherry-605001.
5. Eastern Power Distribution Company of Andhra Pradesh Limited,
P&T Colony, Seethmmadhara,
Vishakhapatnam, Andhra Pradesh.



6. Southern Power Distribution Company of Andhra Pradesh Limited,
D. No: 19-13-65/A, Srinivasapuram, Corporate Office,
Tiruchanoor Road, Tirupati,
Chittoor District, Andhra Pradesh.
7. Southern Power Distribution Company of Telangana Limited,
6-1-50, Corporate Office, Mint Compound,
Hyderabad, Telangana-500063.
8. Northern Power Distribution Company of Telangana Limited,
H.No 2-5-3 1/2, Vidyut Bhawan, Corporate Office, Nakkal Gutta, Hanamkonda,
Warangal, Telangana-506001.
9. Bangalore Electricity Supply Company Limited,
Corporate Office, K.R.Circle
Bangalore, Karanataka-560001.
10. Gulbarga Electricity Supply Company Limited,
Station Main Road, Gulbarga, Karnataka.
11. Hubli Electricity Supply Company Limited,
Navanagar, PB Road, Hubli, Karnataka.
12. Mangalore Electricity Supply Company Limited,
MESCOM Corporate Office, MESCOM Bhavan,
Kavoor Cross Road, Bejai,
Mangalore-575004.
13. Chamundeswari Electricity Supply Corporation Limited,
CESC Mysore Corporate Office,
#29, Vijayanagara 2nd Stage, Hinkal, Mysuru-570017. ... Respondent(s)

Parties Present : Shri Mohd. Mohsin, PGCIL
Shri A. Naresh Kumar, PGCIL

ORDER

The Petitioner, Power Grid Corporation of India Limited, has filed the instant petition for the determination of 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 the following 03 Nos. transmission assets (hereinafter referred



to as the “transmission assets”) under “Augmentation of Transformation Capacity” (hereinafter referred to as “the transmission project”) in the Southern Region:

Asset-1: Addition of 1x500 MVA, 400/220 kV ICT (3rd) along with associated bays at Palakkad Sub-station,

Asset-2: Addition of 1x500 MVA, 400/220 kV ICT (3rd) along with associated bays at Kolar Sub-station, and

Asset-3: Addition of 1x500 MVA, 765/400 kV ICT (3rd) along with associated bays at Nizamabad Sub-station (GIS).

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

- “1) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.*
- 2) Approve the Transmission Tariff for the tariff block 2019-24 block for the assets covered under this petition, as per para –8.3 above.*
- 3) Condone the time overrun in commissioning of Assets covered under instant petition.*
- 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 impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.*
- 8) Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses separately.*
- 9) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*
- 10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any*



statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

- 11) *Allow interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.*
- 12) *Allow Final tariff in accordance with Regulation 10 (5) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges*

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

Background

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

- (i) The Investment Approval (the IA) for the transmission project was accorded by the Committee on Investment on Projects in its 129th meeting held on 27.3.2022 and communicated vide the Memorandum Ref. No.: C/CP/PA2122-12-0AAU-IA038 dated 28.3.2022 at an estimated cost of ₹17622.00 lakh including an IDC of ₹536.00 lakh based on the December 2021 price level.
- (ii) The augmentation of the transformation capacity in the various Sub-stations of the Southern Region was approved in the 3rd meeting of SRPC(TP) held on 24.8.2021. Subsequently, the transmission project was recommended for implementation through the Regulated Tariff Mechanism (RTM) route in the 06th National Committee of Transmission (NCT) held on 29.10.2021.
- (iii) Accordingly, CTUIL, vide letter dated 23.12.2021 communicated to the Petitioner that NCT in its 6th and 7th meeting held on 29.10.2021 and 3.12.2021, respectively, has approved the implementation of the ISTS transmission projects and NTC vide its letter dated 21.12.2021 and 22.12.2021 has awarded for the implementation of the "Augmentation of



transformation capacity in Southern region” to CTUIL under the RTM mode. CTUIL, vide the said letter, also informed the Petitioner regarding the implementation agreement of the transmission project by the Petitioner through the RTM mode at an estimated cost of ₹12500.00 lakh with an implementation time frame of 15 months from the date of issue of the MoP OM, i.e., by 20.3.2023.

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

Sub-station:

- a) Augmentation by 1x500 MVA, 400/220 kV ICT (3rd) at Palakkad (PG) Sub-station (2x315 MVA already existing)
 - i. 400 kV
 - 1x500 MVA, 400/220 kV Transformer.
 - 1 No. ICT Bay
 - ii. 220 kV
 - 1 No. ICT Bay
- b) Augmentation by 1x500 MVA, 400/220 kV ICT (3rd) at Kolar (PG) Sub-station (2x500 MVA already existing)
 - i. 400 kV
 - 1x500 MVA, 765/400 kV Transformer.
 - 1 No. ICT Bay
 - ii. 220 kV
 - 1 No. ICT Bay
- c) Augmentation by 1x1500 MVA, 765/400 kV ICT (3rd) at Nizamabad (PG) Sub-station (2x1500 MVA already existing)
 - i. 765 kV
 - 1x1500 MVA, 400/220 kV Transformer.
 - 1 No. ICT Bay (GIS)*
 - ii. 400 kV
 - 1 No. ICT Bay (GIS)

**GIS bay already existing only small portion of GIS along with AIS equipment are required to facilitate the connection of the transformer.*



- (v) The details of the transmission assets covered in the transmission project are as follows:

Asset No.	Name of the Asset	SCOD as per IA	Actual COD
Asset-1	Addition of 1x500 MVA, 400/220 kV ICT (3 rd) along with associated bays at Palakkad Sub-station	20.3.2023	15.12.2023
Asset-2	Addition of 1x500 MVA, 400/220 kV ICT (3 rd) along with associated bays at Kolar Sub-station		24.3.2024
Asset-3	Addition of 1x1500 MVA, 765/400 kV ICT (3 rd) along with associated bays at Nizamabad Sub-station (GIS)		11.1.2024

- (vi) The entire transmission assets under the instant transmission project have been completed.
- (vii) As per the IA dated 27.2.2022, the transmission project was scheduled to be commissioned within 15 months from the date of issue of the MoP OM, i.e, by 20.3.2023. Hence, the details of the scheduled date of commercial operation (SCOD), date of commercial operation (COD), and time over-run with respect to the transmission assets are as follows:

Asset No.	SCOD as per IA	Actual COD	Delay (in days)
Asset-1	20.3.2023	15.12.2023	270
Asset-2		24.3.2024	370
Asset-3		11.1.2024	297

4. The Respondents, mainly beneficiaries of the Southern Region, are distribution licensees, transmission licensees, and power departments that are procuring transmission service 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. No reply has been received from any of the Respondents.

6. The hearing in this matter was held on 8.11.2024 and the order was reserved. This order is issued considering the Petitioner's submissions in the Petition vide affidavit dated 19.12.2023 and subsequent affidavits dated 7.5.2024 and 15.11.2024

7. Having heard the representative of the Petitioner and perused the materials available on record, we proceed to dispose of the petition.

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2023-24

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

Asset-1

(₹ in lakh)	
Particulars	2023-24 (pro-rata for 108 days)
Depreciation	27.80
Interest on Loan	26.70
Return on Equity	28.01
Interest on Working Capital	4.66
O&M Expenses	79.15
Total AFC	165.60

Asset-2

(₹ in lakh)	
Particulars	2023-24 (pro-rata for 08 days)
Depreciation	3.56
Interest on Loan	3.58
Return on Equity	3.18
Interest on Working Capital	0.42
O&M Expenses	5.86
Total AFC	17.23



Asset-3

(₹ in lakh)	
Particulars	2023-24 (pro-rata for 81 days)
Depreciation	88.77
Interest on Loan	89.27
Return on Equity	93.47
Interest on Working Capital	12.44
O&M Expenses	192.95
Total AFC	476.90

9. The Petitioner has claimed the following Interest on Working Capital (IWC) for the transmission assets for the 2019-24 period:

Asset-1

(₹ in lakh)	
Particulars	2023-24 (pro-rata for 108 days)
O&M Expenses	22.35
Maintenance Spares	40.24
Receivables	69.00
Total Working Capital	131.59
Rate of Interest (in %)	12.00
Interest on Working Capital	15.79
Interest on Working Capital	4.66

Asset-2

(₹ in lakh)	
Particulars	2023-24 (pro-rata for 08 days)
O&M Expenses	22.35
Maintenance Spares	40.24
Receivables	96.93
Total Working Capital	159.52
Rate of Interest (in %)	12.00
Interest on Working Capital	19.14
Interest on Working Capital	0.42

Asset-3

(₹ in lakh)	
Particulars	2023-24 (pro-rata for 81 days)
O&M Expenses	72.65
Maintenance Spares	130.78
Receivables	264.94
Total Working Capital	468.37
Rate of Interest (in %)	12.00
Interest on Working Capital	56.20
Interest on Working Capital	12.44



Date of Commercial Operation (“COD”)

10. The Petitioner, vide affidavit dated 7.5.2024, has submitted that the Assets-1, 2 and 3 were put into commercial operation on 15.12.2023, 24.3.2024, and 11.1.2024, respectively. In support of the COD of the transmission assets, the Petitioner has submitted the following supporting documents:

Sr. No.	Particulars	Documents.
1	Asset-1	CEA energization certificate dated 3.11.2023, SRLDC charging certificate dated 29.12.2023 certifying that successful trial operation was completed on 14.12.2023, Self-declaration certificate dated 15.12.2023 and CMD certificate.
2	Asset-2	CEA energization certificate dated 17.3.2024, SRLDC charging certificate dated 28.3.2024 certifying that successful trial operation was completed on 23.3.2024, Self-declaration certificate dated 24.3.2024, and CMD certificate.
3	Asset-3	CEA energization certificate dated 29.11.2023, SRLDC charging certificate dated 23.1.2024 certifying that successful trial operation was completed on 10.1.2024, Self-declaration certificate dated 11.1.2024, and CMD certificate.

11. Regulation 5 of the 2019 Tariff Regulations provides as follows:

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

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

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

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

- (a) Energisation certificate issued by the Regional Electrical Inspector under Central Electricity Authority;*
- (b) Trial operation certificate issued by the concerned RLDC for charging element with or without electrical load;*



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

(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.”

12. We have considered the Petitioner’s submission. It has been observed that the list of equipments annexed with the CEA Energization Certificates dated 3.11.2023 and 29.11.2023 for Assets-1 and 3, respectively, has not been submitted by the Petitioner. Therefore, the Petitioner is directed to submit the said enclosures of equipments at the time of truing up.

13. Taking into consideration the CEA Energization Certificate, SRLDC Trail Run Certificate, and COD Certificate, as per Regulation 27 of the 2023 IEGC Regulation, the



COD of Assets-1, 2, and 3 has been approved as 15.12.2023, 24.3.2024 and 11.1.2024, respectively.

Capital Cost

14. 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.”

15. The Petitioner, vide affidavit dated 7.5.2024, has submitted the Auditor's Certificate 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 as follows:



(₹ in lakh)

Assets	FR Apportioned Approved cost	Expenditure up to COD	Projected ACE			Estimated Completion Cost
			2023-24	2024-25	2025-26	
Asset-1	3202.43	530.68	2314.85	346.69	0.00	3192.22
Asset-2	4415.52	3097.01	47.79	1097.52	0.00	4242.31
Asset-3	10004.05	7239.94	592.72	1910.95	0.00	9743.61
Total	17622.00	10867.62	2955.36	3355.16	0.00	17178.14

16. Further, as per Form-5, submitted by the Petitioner, vide affidavit dated 15.11.2024, some major variations between the estimated cost vis-à-vis the completion cost of the equipments have been observed, and the same are as follows:

Asset-1

(₹ in lakh)

Sr. No.	Particulars	Estimated Cost	Completion Cost	Variation
1	Transformer	1736.54	2365.59	629.05
2	Auxiliaries	15.74	74.94	59.20
3	Structures for Switchyard and structures foundation/Civil work	130.56	170.34	39.78

Asset-2

(₹ in lakh)

Sr. No.	Particulars	Estimated Cost	Completion Cost	Variation
1	Civil Works	20.00	60.95	40.95
2	Transformer	1736.54	2578.46	841.92
3	Auxiliaries	25.03	112.72	87.69
4	Structures for Switchyard and structures foundation/Civil work	240.18	340.48	100.30

Asset-3

(₹ in lakh)

Sr. No.	Particulars	Estimated Cost	Completion Cost	Variation
1	Civil Works	20.00	31.00	11.00
2	Switchgears (CT, PT, Circuit Breaker, Isolators etc.)	0.00	98.04	98.04
3	Sub-station Auxiliaries	86.23	252.18	165.95
4	Structures for Switchyard and structures foundation/Civil work	130.56	170.34	39.78



17. The Petitioner is directed to justify the reasons along with the supporting documents for the aforementioned variation in the completion cost of some equipment at the time of truing up to review the same.

18. Further, it has been observed that the NCT has conveyed the approval of the transmission project vide letter dated 21.12.2021 for implementation through the RTM mode at an approximate cost of ₹12500.00 lakhs. However, the Petitioner has accorded the IA at an estimated cost of ₹17622.00 lakhs, including an IDC of ₹536.00 lakhs on the December 2021 price level. Thus, there is a variation of ₹5122.00 lakhs (40.97%) in the IA cost approved by the Petitioner as compared to the cost estimate by the NCT. In this regard, the Commission, vide order dated 1.11.2024 in Petition No. 351/TT/2023, held as under:

“6. Accordingly, the commission directs CTUIL to put in place a procedure in consultation with NCT for ratification/approval of the schemes in case of the following (1) variation of IA cost beyond 10% of CTUIL’s estimated cost, (2) Where the IA cost arrived at by the implementing agency exceeds 100 cr for a transmission scheme awarded by CTUIL.”

19. Accordingly, the CTUIL is directed to put in place a procedure in consultation with the NCT for ratification/approval of the schemes in case of (1) variation of the IA cost beyond 10% of the CTUIL’s estimated cost, (2) Where the IA cost arrived at by the implementing agency exceeds ₹100 crores for a transmission scheme awarded by the CTUIL. Further, the Petitioner is also directed to justify the reasons along with the supporting documents for such huge variations in the estimated cost of the IA and NCT at the time of truing up to review the same.



20. Therefore, as the estimated completion cost is ₹17178.14 lakh, which is within the FR apportioned approved cost of ₹17622.00 lakh, and there is no cost overrun, the capital cost claimed by the Petitioner is, hereby, allowed.

Time Overrun

21. The Petitioner has submitted that as per the IA, the transmission assets were scheduled to be commissioned within 15 months from the date of the MoP OM, i.e., by 20.3.2023. Against which, Assets-1, 2, and 3 were put into commercial operation on 15.12.2023, 24.3.2024, and 11.1.2024, with a time overrun of 270 days, 370 days, and 297 days. respectively.

22. The Petitioner has submitted that the transmission assets were delayed mainly due to the delay in supply of the Control Relay Panel (CRP), System Automation System (SAS), and Local Control Cubicle (LCC) due to the global semi-conductor chip shortage and delay in getting the shutdown of 220 kV Bus-I and Bus-II due to the system constraints.

23. Further, the Petitioner, vide affidavit dated 7.5.2024, has submitted that the delay in commissioning of the transmission assets is mainly due to the global semi-conductor chip shortage and the Russia-Ukraine war.

Analysis and Decision

24. As per the IA dated 27.3.2022, the transmission assets were scheduled to be commissioned within 15 months from the date of the MoP OM, i.e., by 20.3.2023. Against which, the transmission assets were put into commercial operation as under:



Asset No.	Name of Asset	SCOD as per IA	Actual COD	Delay (in days)
Asset-1	Addition of 1x500 MVA, 400/220 kV ICT (3 rd) along with associated bays at Palakkad Sub-station	20.3.2023	15.12.2023	270
Asset-2	Addition of 1x500 MVA, 400/220 kV ICT (3 rd) along with associated bays at Kolar Sub-station		24.3.2024	370
Asset-3	Addition of 1x1500MVA, 765/400 kV ICT (3 rd) along with associated bays at Nizamabad Sub-station (GIS)		11.1.2024	297

25. According to the Petitioner, due to a delay in the supply of the Control Relay panel (CRP), system Automation system (SAS), and Local Control Cubicle (LCC) owing to the global semi-conductor chip shortage and the Russia-Ukraine war, the project was delayed. The detailed reasons submitted by the Petitioner for time over-run are analyzed as follows:

A. **Supply delay due to Global Semi-conductor Chip shortage:**

The Petitioner has submitted that the global semi-conductor chip shortage indeed had significant implications in the power sector industry globally from early 2020 after the Covid-19 pandemic to 2023. Semi-conductor chips are critical components in electronic devices used in CRP of Switchyard Equipment/Transformer. A shortage of these chips caused a delay in manufacturing of the CCRP and supplying them to the site. Based on the data received from the manufacturer with respect to the CRP, M/s Hitachi had delays in the supply of the relays such as REB 500, which has impacted the manufacturing of the CRP Panels.

B. **Supply delay due to Russia-Ukraine war:**

The Petitioner has submitted that due to the Russia-Ukraine war, the supply of Raw materials was impacted. The supply of a Gas density monitor (GD) for GIS was to be received at the Hysoung factory from TRAFAG Switzerland.



26. We have considered the Petitioner's submission and have gone through the documents placed on the record.

27. With respect to Assets-1 and 2, it has been observed that M/s Associated Power Structures Private Limited, the contractual agency, vide letter dated 11.5.2023, has intimated to the Petitioner that the panels are ready at M/s Hitachi works for dispatch, but due to the non-availability/mounting of the 2 nos. REB500 relay for the Palakkad extension project, the Carriage and Insurance paid (CIP), and the Material Inspection Clearance Certificate (MICC) were not issued by the concerned inspecting authority of the Petitioner's company, and the panels were not dispatched. The contractual agency further intimated that due to the global component crises, the delivery of REB500 was expected by 25.7.2023 and will be directly supplied to the Palakkad site; the same will be mounted during the erection and commissioning and requested the Petitioner to issue the conditional CIP and MICC for dispatch of 400 kV and 220 kV CRP panels.

28. It has been observed that the request to accord the approval for the supply of the CRP panels without the REB500 relay for Asset-1 was made in May 2023, whereas the said asset was commissioned in December 2023. The Petitioner has not provided the information on whether the said request was approved by the Petitioner or not and when the said CRP was received, installed, and commissioned at the site.

29. The Petitioner is directed to submit the when PGCIL accorded approval of the CRP panels and CRP panels received at the site at the time of truing-up and the same will be reviewed at the time of truing-up.

C. **Supply delay due to Russia-Ukraine war**

30. The Petitioner has submitted that due to the Russia-Ukraine war, the supply chain of the raw material was impacted. The Petitioner has further submitted that the supply of



GDM for GIS, which was to be received at the Hyosung factory from TRAFAG, and the supplier encountered challenges in sourcing essential components for their operations, resulting in delays of 12 months in supply.

31. We have considered the Petitioner's submissions and have gone through the documents placed on record. We have observed that the Petitioner has not claimed the time overrun with respect to Assets-1 and 2 due to the Russia-Ukraine war. Further, it has been observed that the Petitioner has submitted a copy of the letter dated 19.1.2023 wherein the contractual agency Techno Electric and Engineering Company Limited intimated to the Petitioner that M/s Hyosung manufactured the GIS materials of the 400 kV GIS Sub-station Nizamabad which were ready for Factory Acceptance test (FAT) from 23rd to 25th January 2023. The contractual agency also intimated that the SF6 GDM for 400 kV GIS has not been received at the Hyosung factory from TRAFAG Switzerland and got delayed due to the Russia-Ukraine war impact on the supply chain of raw material and requested to arrange the approval for issuance of Cat-B CIP in the absence of SF6 GDM.

32. It has been observed that the request to accord the approval for issuance of the Cat-B CIP in the absence of SF6 GDM for Asset-3 was made in January 2023, whereas the transmission asset was commissioned in January 2024. The Petitioner has not provided the information on whether the said approval was accorded by the Petitioner or not and when the GIS material for Asset-3 was received, installed, and commissioned at the site. The petitioner is directed to submit as to when the raw material shall be delivered as per the original schedule vs. the actual date of delivery of raw material to the site and the time period affected supplies on account of the Russian-Ukraine war at the time of truing-up and the time overrun on this will be reviewed at the time of truing-up.



33. Regulation 22 of the 2019 Tariff Regulations provides the 'controllable and uncontrollable factors' 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.”*

34. As per Regulation 22 of the 2019 Tariff Regulations, any kind of delay in the execution of the transmission project on account of delay from the contractor is categorized under the controllable factors.

35. The claim of the Petitioner for the time overrun in the case of the transmission assets in the supply of material is on the part of the contractor, and thus, as per Regulation 22 of the 2019 Tariff Regulations, the said delay comes under the category of the controllable factors, and, therefore, we are not inclined to condone the time overrun claimed by the Petitioner on the aforementioned reasons.

36. As discussed above, the liberty is given to the petitioner delay on account of the Russian-Ukraine war, and the same will be reviewed at the time of truing-up.



37. We also have observed that the Petitioner, in support of its claim, has submitted a copy of paper cuttings and IFAC conference papers to justify the reasons for time overrun, which are general in nature and not concerned particularly with the time overrun of the transmission assets.

38. Therefore, the summary of time over-run claimed by the Petitioner and time over-run condoned/not condoned are as follows:

Assets	SCOD, as per IA	Actual COD	Time Delay Claimed	Time Over-run Condoned	Time Overrun not Condoned
Asset-1	20.3.2023	15.12.2023	270 days	NIL	270 days
Asset-2		24.3.2024	370 days	NIL	370 days
Asset-3		11.1.2024	297 days	NIL	297 days

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

39. The Petitioner, has claimed the IDC of ₹10.07 lakh, ₹33.36 lakh, and ₹175.55 lakh and the IEDC of ₹142.15 lakh, ₹157.67 lakh and ₹980.83 lakh towards Asset-1, Asset-2 and Asset-3, respectively.

40. We have gone through the drawl schedule of the loans submitted by the Petitioner and have observed that in the IDC statement provided by the Petitioner, drawls of certain loans are after the SCOD, beyond which the Commission has not condoned the time overrun, i.e., 20.3.2023. Hence, the same is disallowed based on the drawl schedule submitted by the Petitioner. Accordingly, the details of IDC allowed and disallowed are as follows:

(₹ in lakh)				
Assets	IDC claimed	IDC disallowed due to delay not condoned	Un-discharged IDC dis-allowed as on COD	IDC allowed as on COD
Asset-1	10.07	9.80	0.27	0.00
Asset-2	33.36	33.00	0.36	0.00
Asset-3	175.55	173.66	1.89	0.00



41. The Petitioner has claimed the IEDC of ₹1280.65 lakh for all the transmission assets. The allowable IEDC has been worked out on a proportionate basis since the complete timer overrun has not been condoned. Accordingly, the details of IEDC allowed and disallowed are as follows:

Assets	IEDC Claimed	(₹ in lakh)	
		IEDC Disallowed due to time over-run not condoned	IEDC Allowed
Asset-1	142.15	61.21	80.94
Asset-2	157.67	80.24	77.43
Asset-3	980.83	445.42	535.41

Initial Spares

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

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

43. The Initial Spares claimed by the Petitioner are as follows:

Assets	Particulars	Plant & Machinery cost (A)	Initial Spares Claimed (B)	Ceiling Limit (in %) (C)	(₹ in lakh)	
					Initial Spares Worked out $D = \frac{[(A-B)*C]}{[100-C]}$	Excess Initial Spares
Asset-1	Sub-station (Brown Field)	3040.00	95.06	6	187.97	Nil
Asset-2	Sub-station (Brown Field)	3981.41	151.38	6	244.47	Nil
Asset-3	Sub-station (GIS Brown Field)	8585.23	478.70	7	610.17	Nil



44. In response to the Commission's query regarding the justification for including the IT cost under plant and machinery cost for computation of the Initial Spares, the Petitioner, vide affidavit dated 15.11.2024, has submitted that the IT equipment has been categorized separately in the Auditor's Certificate for the purpose of computation of depreciation as per the depreciation rates specified in the 2019 Tariff Regulations. However, no separate norms are available for the calculation of the Initial Spares for the IT equipments in the 2019 Tariff Regulations. Hence, the cost of the IT equipments has been clubbed with the Sub-station equipment cost for the determination of the 'Plant & Machinery Cost' for computation of the Initial Spares eligibility under the transmission assets/project.

45. We have considered the Petitioner's submissions. It is noticed that the Initial Spares claimed in Form-13 is not matching with that of the Auditor's Certificate. Accordingly, the Petitioner is directed to clarify the said mismatch of the value of the Initial Spares mentioned in Form-13 and in the Auditor's Certificate at the time of truing up.

46. In view of the above and as per Regulation 23(d) of the 2019 Tariff Regulations, the following Initial Spares are allowed subject to the submission of clarification by the Petitioner at the time of truing up:

(₹ in lakh)						
Assets	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)
Asset-1	3040.00	95.06	6	187.97	Nil	95.06
Asset-2	3981.41	151.38	6	244.47	Nil	151.38
Asset-3	8585.23	478.70	7	610.17	Nil	478.70



Capital Cost Allowed as on the COD

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

(₹ in lakh)					
Assets	Capital cost claimed till COD	Less: IDC disallowed due to time over-run	Less: IEDC disallowed due to time over-run	Less: Undischarged IDC as on COD	Capital cost as on COD
Asset-1	530.68	9.80	61.21	0.27	459.40
Asset-2	3097.01	33.00	80.24	0.36	2983.41
Asset-3	7239.94	173.66	445.42	1.89	6618.97

Additional Capital Expenditure (“ACE”)

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

“24. Additional Capitalization

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

- a. *Un discharged liabilities recognized to be payable at a future date;*
- b. *Works deferred for execution;*
- c. *Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;*
- d. *Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law; 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.”*

49. The Petitioner has claimed the ACE against the transmission assets as follows:

(₹ in lakh)

Assets	Projected ACE		
	2023-24	2024-25	2025-26
Asset-1	2314.85	346.69	0.00
Asset-2	47.79	1097.51	0.00
Asset-3	592.72	1910.95	0.00
Total	2955.36	3355.15	0.00

50. The Petitioner has further 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 follows:

Asset-1

(₹ in lakh)

Asset No.	Headwise/Partywise	Particulars	Year of Actual Capitalization	Outstanding Liability as on COD (15.12.2023)	Discharge				Additional Liability Recognized				Outstanding Liability as on 31.3.2025
					2023-24	2024-25	2025-26	Total	2023-24	2024-25	2025-26	Total	
1	M/s. Associated Power Structure Pvt Ltd.	Sub-station		224.36		44.9		44.9	131.32	48.15	-	179.46	-
2	M/s. Associated Power Structure Pvt Ltd.	SAS		0.36				-	0.36	-	-	0.36	-
3	M/s. Siemens Ltd	Sub-station		2410.96	1960.26	182.41		2142.67	222.92	45.37	-	268.29	0.00
4	Construction of shed for parking of	Building and Civil Work		25.86		-		-		25.86		25.86	-



Asset No.	Headwise/Partywise	Particulars	Year of Actual Capitalization	Outstanding Liability as on COD (15.12.2023)	Discharge			Additional Liability Recognized			Outstanding Liability as on 31.3.2025		
	equipment and machinery being used for maintenance of switchyard at Palakkad station												
	Total			2661.54	1960.26	227.31	-	2187.57	354.59	119.38	-	473.97	0.00

Asset-2

(₹ in lakh)

Asset No.	Headwise/Partywise	Particulars	Year of Actual Capitalization	Outstanding Liability as on COD/ 31st March 2014*	Discharge			Additional Liability Recognized			Outstanding Liability as on
					2023-24	2024-25	Total	2023-24	2024-25	Total	
1	M/s. Associated Power Structure Pvt Ltd.	Sub-station		680.74		204.03	204.03	47.79	428.92	476.71	-
2	M/s. Siemens Ltd.	Sub-station		23.6		23.6	23.6	-	-	-	-
3	M/s. Transformers & Rectifiers (India)	Sub-station		404.62		404.63	404.63	-	-	-	-
4	Prasanthi Transmission Constructions- Construction of shed for parking of equipment and machinery being used for maintenance of switchyard " at Kotar Station"	Building and Civil		21.72		6.10	6.10		15.63	15.63	(0.00)
5	K. Sreenivasulu- Water Proofing works over roof of HVAC control room building" at Kolar Station"	Building and Civil		0.36			-		0.36	0.36	0.00
6	Sri Nataraj Electricals- Supply and Installation for 105Sq mm 3Cx33Kv straight through cable joint kit at Kolar Substation.	Sub-station		0.08		0.08	0.08				(0.00)
7	B. S CHANDHRAMOULI- Construction of Rest room for Contract Labour at Kolar Substation.	Building and Civil		5.26			-		5.26	5.26	(0.00)
8	Heavy Duty Storage racks are for storage of ICT III Spares	Sub-station		8.91		8.91	8.91				-
	Total			1145.3	-	647.34	647.34	47.79	450.17	497.96	(0.00)

Asset-3

(₹ in lakh)

Sl. No.	Name of The Vendor	FY 23-24		FY 24-25(ESTIMATED)	
		Work Executed	Liability Release	Work Executed	Liability Release
1	Techno Electric and Engineering Company	395.48	-	1,031.89	341.46
2	GE T&D India Limited		197.24	-	326.60
3	Site Packages		-	211.00	-
	Total	395.48	197.24	1242.89	668.06

51. The Petitioner has submitted that the admissibility of the ACE after the COD may be dealt with in accordance with Regulation 24 of the 2019 Tariff Regulations. It is noticed that the Petitioner has also claimed the ACE for the FYs 2024-25 and 2025-26 for the



transmission assets, which shall be dealt with in accordance with the 2024 Tariff Regulations in the future.

52. We have considered the Petitioner's submissions and have observed that since the ACE claimed is on account of the balance and retention payments, the same is allowed in terms of Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. The total ACE allowed for the 2019-24 tariff period is as follows:

(₹ in lakh)

Particulars	ACE Allowed	IDC Discharge	Total ACE Allowed
	2023-24	2023-24	2023-24
Asset-1	2314.85	0.27	2315.12
Asset-2	47.79	0.36	48.15
Asset-3	592.72	1.89	594.61

53. Accordingly, the capital cost allowed as on 31.3.2024 is as follows:

(₹ in lakh)

Capital cost allowed as on COD	Total ACE Allowed	Capital cost as on
	2023-24	31.3.2024
459.40	2315.12	2774.52
2983.41	48.15	3031.56
6618.97	594.61	7213.57

Debt Equity Ratio

54. Regulations 18 of the 2019 Tariff Regulations provides as follows:

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

Provided that:

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

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



return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

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

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

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

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

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

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

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

55. The debt-equity ratio considered for the purpose of computation of tariff for the 2019-24 period for the transmission assets are as follows:

Assets	Particulars	Capital cost as on COD (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Asset-1	Debt	321.58	70	1942.16	70
	Equity	137.82	30	832.36	30
	Total	459.40	100	2774.52	100



Assets	Particulars	Capital cost as on COD (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Asset-2	Debt	2088.39	70	2122.09	70
	Equity	895.02	30	909.47	30
	Total	2983.41	100	3031.56	100
Asset-3	Debt	4633.28	70	5049.50	70
	Equity	1985.69	30	2164.07	30
	Total	6618.97	100	7213.57	100

Depreciation

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

57. The IT equipment has been considered as a part of the gross block and depreciated using the Weighted Average Rate of Depreciation (WAROD). WAROD has



been worked out and placed as an Annexure, considering the depreciation rates of the IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of the IT equipment has been considered nil, i.e., IT assets have been considered as 100% depreciable. Depreciation allowed in respect of the transmission assets for the 2019-24 tariff period is as follows:

Asset-1

		(₹ in lakh)
	Particulars	2023-24 (pro rata for 108 days)
A	Opening Gross Block	459.40
B	Addition during the year 2019-24 due to projected ACE	2315.12
C	Closing Gross Block (A+B)	2774.52
D	Average Gross Block (A+C)/2	1616.96
E	Average Gross Block (90% depreciable assets)	1587.90
F	Average Gross Block (100% depreciable assets)	29.06
G	Depreciable value (excluding IT equipment and software) (E*90%)	1429.11
H	Depreciable value of IT equipment and software (F*100%)	29.06
I	Total Depreciable Value (G+H)	1458.17
J	Weighted average rate of Depreciation (WAROD) (in %)	5.45
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)	26.03
N	Cumulative Depreciation at the end of the year	26.03
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	1432.14

Asset-2

		(₹ in lakh)
	Particulars	2023-24 (pro rata for 8 days)
A	Opening Gross Block	2983.41
B	Addition during the year 2019-24 due to projected ACE	48.15
C	Closing Gross Block (A+B)	3031.56
D	Average Gross Block (A+C)/2	3007.48
E	Average Gross Block (90% depreciable assets)	3007.48
F	Average Gross Block (100% depreciable assets)	0.00
G	Depreciable value (excluding IT equipment and software) (E*90%)	2706.74
H	Depreciable value of IT equipment and software (F*100%)	0.00
I	Total Depreciable Value (G+H)	2706.74
J	Weighted average rate of Depreciation (WAROD) (in %)	5.26
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)	3.46
N	Cumulative Depreciation at the end of the year	3.46
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	2703.28



Asset-3

(₹ in lakh)

	Particulars	2023-24 (pro rata for 81 days)
A	Opening Gross Block	6618.97
B	Addition during the year 2019-24 due to projected ACE	594.61
C	Closing Gross Block (A+B)	7213.57
D	Average Gross Block (A+C)/2	6916.27
E	Average Gross Block (90% depreciable assets)	6861.25
F	Average Gross Block (100% depreciable assets)	55.02
G	Depreciable value (excluding IT equipment and software) (E*90%)	6175.12
H	Depreciable value of IT equipment and software (F*100%)	55.02
I	Total Depreciable Value (G+H)	6230.14
J	Weighted average rate of Depreciation (WAROD) (in %)	5.36
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)	82.00
N	Cumulative Depreciation at the end of the year	82.00
O	Remaining Aggregate Depreciable Value at the end of the year (I-N)	6148.14

Interest on Loan (“IoL”)

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

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

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

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

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

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

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



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

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

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

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

59. The Weighted Average Rate of Interest (WAROI) on the loan has been considered as claimed by the Petitioner. The Petitioner has prayed that the change in interest rate due to the floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up.

60. The IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations, and the same is as follows:

Asset-1

		(₹ in lakh)
	Particulars	2023-24 (pro rata for 108 days)
A	Gross Normative Loan	321.58
B	Cumulative Repayments up to Previous Year	0.00
C	Net Loan-Opening (A-B)	321.58
D	Addition due to ACE	1620.58
E	Repayment during the year	26.03
F	Net Loan-Closing (C+D-E)	1916.14
G	Average Loan (C+F)/2	1118.86
H	Weighted Average Rate of Interest on Loan (in %)	7.76
I	Interest on Loan (G*H)	25.63

Asset-2

		(₹ in lakh)
	Particulars	2023-24 (pro rata for 8 days)
A	Gross Normative Loan	2088.39
B	Cumulative Repayments up to Previous Year	0.00



	Particulars	2023-24 (pro rata for 8 days)
C	Net Loan-Opening (A-B)	2088.39
D	Addition due to ACE	33.70
E	Repayment during the year	3.46
F	Net Loan-Closing (C+D-E)	2118.64
G	Average Loan (C+F)/2	2103.51
H	Weighted Average Rate of Interest on Loan (in %)	7.57
I	Interest on Loan (G*H)	3.48

Asset-3

	Particulars	2023-24 (pro rata for 81 days)
A	Gross Normative Loan	4633.28
B	Cumulative Repayments up to Previous Year	0.00
C	Net Loan-Opening (A-B)	4633.28
D	Addition due to ACE	416.22
E	Repayment during the year	82.00
F	Net Loan-Closing (C+D-E)	4967.50
G	Average Loan (C+F)/2	4800.39
H	Weighted Average Rate of Interest on Loan (in %)	7.57
I	Interest on Loan (G*H)	80.43

Return on Equity (“RoE”)

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

“30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.
(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

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

Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to



load dispatch centre or protection system based on the report submitted by the respective RLDC;

ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

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

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

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

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

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

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

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

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.”

62. The Petitioner has submitted that the MAT rate is applicable to it. Accordingly, 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. RoE allowed in respect of the transmission assets for the 2019-24 period is as follows:

Asset-1

		(₹ in lakh)
	Particulars	2023-24 (pro rata for 108 days)
A	Opening Equity	137.82
B	Addition due to ACE	694.54
C	Closing Equity (A+B)	832.36
D	Average Equity (A+C)/2	485.09
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)	26.88

Asset-2

		(₹ in lakh)
	Particulars	2023-24 (pro rata for 8 days)
A	Opening Equity	895.02
B	Addition due to ACE	14.44
C	Closing Equity (A+B)	909.47
D	Average Equity (A+C)/2	902.25
E	Return on Equity (Base Rate) (in %)	15.50



	Particulars	2023-24 (pro rata for 8 days)
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)	3.70

Asset-3

		(₹ in lakh)
	Particulars	2023-24 (pro rata for 81 days)
A	Opening Equity	1985.69
B	Addition due to ACE	178.38
C	Closing Equity (A+B)	2164.07
D	Average Equity (A+C)/2	2074.88
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)	86.24

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

63. The Petitioner has claimed the O&M Expenses for the transmission assets as follows:

		(₹ in lakh)
Particulars	2023-24	
Asset-1	79.15	
Asset-2	5.86	
Asset-3	192.95	

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

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

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



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

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

Asset-1

Particulars	(₹ in lakh)
	2023-24 (pro-rata for 108 days)
Sub-station Bays	
400 kV ICT Bay	1
Norms as per Regulation 35(3)(a) of the 2019 Tariff Regulations	36.91
O&M Expenses	10.89
220 kV ICT Bay	1
Norms as per Regulation 35(3)(a) of the 2019 Tariff Regulations	25.84
O&M Expenses	7.62
Transformer in MVA	
400 kV ICT MVA rating	500
Norms as per Regulation 35(3)(a) of the 2019 Tariff Regulations	0.411
O&M Expenses	60.64
Total O&M Expenses	79.15

Asset-2

Particulars	(₹ in lakh)
	2023-24 (pro-rata for 8 days)
Sub-station Bays	
400 kV ICT Bay	1
Norms as per Regulation 35(3)(a) of the 2019 Tariff Regulations	36.91
O&M Expenses	0.81
220 kV ICT Bay	1



Norms as per Regulation 35(3)(a) of the 2019 Tariff Regulations	25.84
O&M Expenses	0.56
Transformer in MVA	
400 kV ICT MVA rating	500
Norms as per Regulation 35(3)(a) of the 2019 Tariff Regulations	0.411
O&M Expenses	4.49
Total O&M Expenses	5.86

Asset-3

Particulars	(₹ in lakh)
	2023-24 (pro-rata for 81 days)
Sub-station Bays	
400 kV ICT Bay (GIS)	1
Norms as per Regulation 35(3)(a) of the 2019 Tariff Regulations	25.84*
O&M Expenses	5.72
Transformer in MVA	
765 kV ICT MVA rating	1500
Norms as per Regulation 35(3)(a) of the 2019 Tariff Regulations	0.564
O&M Expenses	187.23
Total O&M Expenses	192.95

**The O&M Expense norms for the GIS bays shall be worked out by multiplying 0.70 of the normative O&M expenses for bays.*

Note: The O&M Expenses for the 765 kV GIS bay have not been allowed because as per IA dated 27.3.2022, the 765 kV GIS bay has already existed, and only a small portion of GIS along with AIS equipment are required to facilitate the connection of transformer.

Interest on Working Capital (“IWC”)

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

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

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

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

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

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

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



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

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

“3. **Definitions.** - In these regulations, unless the context otherwise requires:-

(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;”

67. The Petitioner has considered the rate of IWC as 10.50% as on 1.4.2019. IWC has been worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) is considered as 10.50% (SBI 1-year MCLR applicable as on COD of 7.00% plus 350 basis points) for the FY 2022-23 and 12.00% (SBI 1-year MCLR applicable as on COD of 8.50% plus 350 basis points). The components of the working capital and interest allowed thereon for the transmission assets are as follows:

Asset-1

Particulars	(₹ in lakh)
	2023-24 (pro rata for 108 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)	67.63
Total Working Capital	130.22
Rate of Interest for working capital (in %)	12.00
Interest on working capital	4.61

Asset-2

Particulars	(₹ in lakh)
	2023-24 (pro rata for 8 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)	95.16
Total Working Capital	157.75
Rate of Interest for working capital (in %)	12.00
Interest on working capital	0.41



Asset-3

(₹ in lakh)

Particulars	2023-24 (pro rata for 81 days)
Working Capital for O&M Expenses (O&M Expenses for one month)	72.65
Working Capital for Maintenance Spares (15% of O&M Expenses)	130.78
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	252.07
Total Working Capital	455.50
Rate of Interest for working capital (in %)	12.00
Interest on working capital	12.10

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

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

Asset-1

(₹ in lakh)

Particulars	2023-24 (pro rata for 108 days)
Depreciation	26.03
Interest on Loan	25.63
Return on Equity	26.88
O&M Expenses	79.16
Interest on Working Capital	4.61
Total	162.31

Asset-2

(₹ in lakh)

Particulars	2023-24 (pro rata for 8 days)
Depreciation	3.46
Interest on Loan	3.48
Return on Equity	3.70
O&M Expenses	5.86
Interest on Working Capital	0.41
Total	16.92

Asset-3

(₹ in lakh)

Particulars	2023-24 (pro rata for 81 days)
Depreciation	82.00
Interest on Loan	80.43
Return on Equity	86.24
O&M Expenses	192.95
Interest on Working Capital	12.10
Total	453.72



Filing Fee and Publication Expenses

69. 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 in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee and RLDC Fees and Charges

70. The Petitioner shall be entitled to the reimbursement of the licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 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

71. The Petitioner has submitted that if GST is levied at any rate and at any point of time in the future on charges of transmission of electricity, the same 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; the same may be allowed to be recovered from the beneficiaries.

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



Security Expenses

73. The Petitioner has submitted that the security expenses in respect of transmission assets are not claimed in the instant petition, and it would file a separate petition for claiming the overall security expenses and consequential IWC as per Regulation 35(3)(c) of the 2019 Tariff Regulations.

74. 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 the overall security expenses and consequential IWC has become infructuous.

Capital Spares

75. 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

76. The COD of the Asset-1, Asset-2 and Asset-3 has been approved as 15.12.2023, 24.3.2024 and 11.1.2024. Accordingly, the billing, collection, and disbursement of transmission charges shall be recovered in terms of the provisions of the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses), Regulations, 2020 as provided in Regulation 57 of the 2019 Tariff Regulations.



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

(₹ in lakh)	
AFC Allowed	2023-24
Asset-1 (pro rata for 108 days)	162.31
Asset-2 (pro rata for 8 days)	16.92
Asset-3 (pro rata for 81 days)	453.72

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

79. This order disposes of Petition No. 85/TT/2024 in terms of the above findings and discussions.

sd/-
(Harish Dudani)
Member

sd/-
(Ramesh Babu V)
Member

sd/-
(Jishnu Barua)
Chairperson



Annexure

Asset-1

(₹ in lakh)

Capex	Admitted Capital Cost as on COD	Projected ACE	Admitted Capital Cost as on 31.3.2024	Depreciation Rate (in %)	Annual Depreciation	
		2023-24			2023-24	
Sub-station	430.52	2314.76	2745.28	5.28	83.84	
IT Equipment	28.88	0.36	29.24	15.00	4.36	
Total	459.40	2315.12	2774.52		88.20	
					Average Gross Block	1616.96
					WAROD (in %)	5.45

Asset-2

(₹ in lakh)

Capex	Admitted Capital Cost as on COD	Projected ACE	Admitted Capital Cost as on 31.3.2024	Depreciation Rate (in %)	Annual Depreciation	
		2023-24			2023-24	
Building	35.88	0.00	35.88	3.34	1.20	
Sub-station	2947.53	48.15	2995.68	5.28	156.90	
Total	2983.41	48.15	3031.56		158.10	
					Average Gross Block	3007.48
					WAROD (in %)	5.26

Asset-3

(₹ in lakh)

Capex	Admitted Capital Cost as on COD	Projected ACE	Admitted Capital Cost as on 31.3.2024	Depreciation Rate (in %)	Annual Depreciation	
		2023-24			2023-24	
Sub-station	6563.95	594.61	7158.55	5.28	362.27	
IT Equipment	55.02	0.00	55.02	15.00	8.25	
Total	6618.97	594.61	7213.57		370.53	
					Average Gross Block	6916.27
					WAROD (in %)	5.36

