CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 167/TT/2022

Coram:

Shri Jishnu Barua, Chairperson
Shri Arun Goyal, Member
Shri P. K. Singh, Member

Date of Order: 19.05.2024

In the matter of:

Petition for determination of transmission tariff for the period from COD to 31.3.2024 for transmission assets under "POWERGRID works associated with North-Eastern Region Strengthening Scheme-V".

And in the matter of:

Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2,
Sector 29, Gurgaon-122001. **….Petitioner**

Vs.

1. Assam Electricity Grid Corporation Limited
(Formerly Assam State Electricity Board)
Bijulee Bhawan, Paltan Bazar,
Guwahati - 781001, Assam

2. Meghalaya Energy Corporation Limited
(Formerly Meghalaya State Electricity Board)
Short Round Road, "Lumjingshai"
Shillong - 793001, Meghalaya

3. Government of Arunachal Pradesh
Itanagar, Arunachal Pradesh

4. Power and Electricity Department
Government of Mizoram
Aizawl, Mizoram

5. Manipur State Power Distribution Corporation Limited
(Formerly Electricity Department, Government of Manipur)
Keishampat, Imphal
6. Department of Power

Government of Nagaland
Kohima, Nagaland

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

8. NER-II Transmission Limited
F-1,The Mira Corporate Suites,
1 & 2, Ishwar Nagar, Mathura Road,
New Delhi 110065
….**Respondent(s)**

For Petitioner : Ms. Swapna Seshadri, Advocate, PGCIL
Shri Utkarsh Singh, Advocate, PGCIL
Shri S.S Raju PGCIL
Shri Zafrul Hasan, PGCIL
Shri Saurav Kumar Jha, PGCIL

For Respondents : Shri Deep Rao Palpu, Advocate, NER-II TL
Shri Arjun Agarwal, Advocate, NER-II TL
Shri Anita Gupta, Advocate, NER-II TL
Ms. Anisha Chopra, NER-II TL

ORDER

Power Grid Corporation of India Limited has filed the instant petition for determination of tariff for the period 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 three transmission assets covered in the “North Eastern Region Strengthening Scheme-V” (hereinafter referred to as “the transmission project”):

Asset-1: Additional 400 kV Double Circuit (“D/C”) line (Circuit-I) at P.K. Bari (TBCB) end and Silchar (PGCIL) end for termination of P.K. Bari (TSECL)-Silchar 400 kV D/C line (initially operated at 132 kV) at 400 kV P.K.Bari

(TBCB) and 400 kV Silchar (GIS)(PGCIL) end along with 400 kV GIS bay at Silchar (PGCIL) Sub-station.

Asset-2: Additional 400 kV D/C line (Circuit-II) at P.K. Bari (TBCB) end and Silchar (PGCIL) end for termination of P.K. Bari (TSECL)- Silchar 400 kV D/C line (initially operated at 132 kV) at 400 kV P.K. Bari (TBCB) and 400 kV Silchar (GIS)(PGCIL) end along with 400 kV GIS bay at Silchar (PGCIL) Sub-station.

Asset-3: Additional 400 kV D/C line at Palatana and Surajmaninagar (TBCB) ends for termination of 400 kV D/C Palatana-Surajmaninagar (TSECL) line at 400 kV Palatana (Bays under TBCB) and 400 kV Surajmaninagar (Sub-station under TBCB).

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

"1) Approve the proposed DOCO under clause 5(2) of Tariff Regulation, 2019 as explained at para 6.30.

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

3) Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para –8.40 above.

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 8.40 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 as mentioned at para 8.9 above.

9) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.

10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in 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 the entire initial spares as claimed in the instant petition on project level.

13) Condone the delay in completion of subject assets on merit of the same being out of the control of Petitioner in line with CERC Regulations'2019.

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".

<u>Background</u>

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

(a) Investment Approval ('IA') for transmission project was accorded by the Board of Directors of the Petitioner's Company on vide Memorandumn No. C/CP/ PA1819-01-0A-IA001 dated 16.4.2018 at an estimated cost of ₹2217 lakh including IDC of ₹138 lakh based on December, 2017 price level.

(b) Revised Cost Estimate (RCE) of the transmission project was accorded by the Board of Directors vide Memorandum No. C/CP/PA2122-10-0AS-RCE010 dated 13.1.2022 at an estimated cost of ₹13096 lakh including IDC of ₹78 lakh based on March, 2017 price level.

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

<u>Transmission Lines</u>

(i) Additional 400 kV D/C line at Palatana end for termination of Palatana-Surajmaninagar 400 kV D/C line (op. at 132 kV) at 400 kV Palatana switchyard

(ii) Additional 400 kV D/C line at Surajmaninagar end for termination of Palatana -Surajmaninagar 400 kV D/C line (op. at 132 kV) line at 400 kV Surajmaninagar Sub-station

(iii) Additional 400 kV D/C line at P.K. Bari end for termination of P. K. Bari - Silchar 400 kV D/C line (initially op. at 132 kV) at 400 kV P.K.Bari Sub-station

(iv) Additional 400 kV D/C line at Silchar end for termination of P.K.Bari-Silchar 400 kV D/C line (initially op. at 132 kV) at 400 kV Silchar Sub-statoin.

Note: The dismantled towers will be kept as spares at regional store.

<u>Sub-stations</u>

(i) **Silchar Sub-station**

*400 kV Line bays: 2 number 400 kV GIS line bays for termination of P.K. Bari- Silchar 400 kV D/C line

*At Silchar Sub-station, under DPR of NERSS-IV two complete diameters (for two GIS bays) have been considered for 400 kV operation of Silchar – Imphal 400 kV D/C line (charged at 132 kV) on account of fact that in case of GIS, due to operational difficulty and problem in future expansion, complete diameter 1& 1/2 Breaker Bus arrangement is required to be procured in one go. Accordingly, in the DPR of NERSS-V provision of procurement of GIS equipments (for two GIS bays) has not been kept at Silchar S/s for 400 kV operation of Silchar – P.K. Bari 400 kV D/C line (charged at 132 kV). Silchar – P.K. Bari 400 kV D/C line shall be terminated in the available two GIS bays being constructed under NERSS-IV. In this scheme, only AIS equipments and associated protection panel pertaining to 400 kV operation of Silchar – P.K. Bari D/C line are being procured.

i) 2x315 MVA, 400/220 kV GIS Sub-station at Pandiabilli

ii) LILO of both cuircuits of Baripada-Mendhasal 400 kV D/C line at Pandiabilli.

4. The scope of the project is completed and covered in the instant petition.

5. The Respondents are distribution licensees, power departments, power utilities and transmission licensees, who are procuring transmission services from the Petitioner, mainly beneficiaries of the North Eastern Region.

6. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also 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 notices published in the newspapers by the Petitioner. NER-II Transmission Limited (NER-II TL), Respondent No. 8 has filed reply vide affidavit dated 14.9.2022. The Petitioner has filed its rejoinder to the reply of NER-II TL vide affidavit dated 6.10.2022. The issues raised by TER-II TL and the clarifications given by the Petitioner have been considered in the relevant portions of this order.

7. NER-II TL vide its reply dated 14.09.2022 has submitted that the pleading filed by it in Petiton No. 134/MP/2021, including rejoinder dated 25.2.2022 filed by NER-II TL, and the affidavit dated 10.12.2021 on behalf of NER-II TL may be read as the part and parcel of its reply in the instant petition. The Petitoner has also submitted in its rejoinder affidavit dated 6.10.2022 that its reply submitted in Petition No. 134/MP/2021 may be read as the part and parcel of the rejoinder filed in the instant petition.

8. The order in the matter was reserved on 22.5.2022. However, the order could not be issued prior to Shri I.S. Jha, Member, demitting the office. Accordingly, the matter was heard again on 6.2.2024 and order was reserved.

9. Having heard the representatives and learned counsels for the Petitioner

and NER-II TL, and having perused the material on record, we proceed to dispose of the petition.

10. This order is issued considering the submissions made by the Petitioner in petition, affidavits dated 9.3.2022, 19.7.2022, 2.8.2022 and 3.8.2022, reply of NER-II TL's reply dated 14.9.2022, rejoinder of the Petitioner dated 6.10.2022 and the written submission of the Petitioner dated 9.6.2023.

Determination of Annual Fixed Charges for 2019-24 Tariff Period

11. The Petitioner has combined Assets-1 and Asset-2 into single 'Combined Asset' and has accordingly claimed combined tariff for them for the 2019-24 tariff period as provided in Regulation 8(1) of the 2019 Tariff Regulations. The Petitioner has claimed separate tariff for Asset-3 for the 2019-24 period.

12. The Petitioner has claimed the following transmission charges for 2019-24 tariff period for the Combined Asset:

(₹ in lakh)

Particulars	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Depreciation	11.58	220.07	258.68	267.13
Interest on Loan	9.39	171.58	188.36	179.08
Return on Equity	12.33	234.31	275.48	284.49
O&M Expenses	3.94	69.42	71.84	74.36
Interest on Working Capital	0.63	11.63	13.08	13.28
Total	**37.87**	**707.01**	**807.44**	**818.34**

13. The Petitioner has claimed the following transmission charges for 2019-24 tariff period for Asset-3:

(₹ in lakh)

Particulars	**2021-22**	**2022-23**	**2023-24**
Depreciation	260.74	337.02	353.17
Interest on Loan	198.33	240.31	232.51
Return on Equity	278.25	359.66	376.89

Particulars	2021-22	2022-23	2023-24
O&M Expenses	10.48	11.44	11.84
Interest on Working Capital	10.07	12.72	13.04
Total	**757.87**	**961.15**	**987.45**

14. The details of IWC claimed by the Petitioner for the 2019-24 tariff period in respect of the Combined Asset are as follows:

(₹ in lakh)

Particulars	2020-21	2021-22	2022-23	2023-24
O&M Expenses	5.58	5.78	5.98	6.20
Maintenance Spares	10.06	10.42	10.78	11.16
Receivables	72.96	87.17	99.55	100.62
Total Working Capital	**88.60**	**103.37**	**116.31**	**117.98**
Rate of Interest (in %)	11.25	11.25	11.25	11.25
Interest on Working Capital	**9.97**	**11.63**	**13.08**	**13.27**

15. The details of IWC claimed by the Petitioner for the 2019-24 tariff period in respect of the Asset-3 are as follows:

(₹ in lakh)

Particulars	2021-22	2022-23	2023-24
O&M Expenses	0.92	0.95	0.99
Maintenance Spares	1.66	1.72	1.78
Receivables	98.57	118.50	121.41
Total Working Capital	**101.15**	**121.17**	**124.18**
Rate of Interest (in %)	10.50	10.50	10.50
Interest on Working Capital	**10.62**	**12.72**	**13.04**

<u>Date of Commercial Operation (COD)</u>

16. The details of the COD of the transmission assets of the Petitioner and the COD of the associated TBCB assets as submitted by the Petitioner are as follows:

Asset	Investment Approval date (24 months)	SCOD	Revised SCOD as per MoP letter dated 27.7.2020	Actual/ Proposed COD	COD of TBCB line
Asset-1*	13.4.2018	1.7.2020		8.3.2021	27.1.2021

Asset	Investment Approval date (24 months)	SCOD	Revised SCOD as per MoP letter dated 27.7.2020	Actual/ Proposed COD	COD of TBCB line
Asset-2*			1.12.2020	13.3.2021	13.3.2021
Asset-3#				20.4.2021 (Proposed under 5(2) of 2019 Tariff Regulations)	27.1.2021 Proposed 11.7.2021 (Power flow)

*Existing Line 400 kV D/C Silchar (PGCIL)-PK Bari (TSECL) transmission line was covered under Project- “Transmission System Associated with Pallatana Gas Based Power Project (GBPP) and Bongaigaon Thermal Power Station (TPS)” in North Eastern Region.

#Existing Line 400 kV D/C Pallatana-Surjamaninagar (TSECL) transmission line was covered under Project “Transmission System Associated with Pallatana Gas Based Power Project (GBPP) and Bongaigaon Thermal Power Station (TPS)” in North Eastern Region.

17. The Petitioner has submitted that Asset-3 was ready for charging on 20.4.2021 but was finally charged and synchronized on 11.7.2021 and the delay was due to non-availability of shut down of 132 kV Palatana-Surjamaninagar for termination of 400 kV Palatana-Surjamaninagar (ISTS) Transmission Line (“T/L”) at 400 kV bays at Pallatana (OTPC) and Surjamaninagar (ISTS) terminal.

COD of Asset-1 and Asset-2

18. In support of the actual COD of the Asset-1, the Petitioner has submitted Central Energy Authority (CEA) energisation certificate dated 27.2.2021, Regional Load Dispatch Centre (RLDC) charging certificate dated 5.4.2021 certifying that 400 kV PK Bari-I bay at Silchar Sub-station has successful completed trial run operation on 7.3.2021 and Chief Managing Director’s (CMD) certificate as required under the Indian Electricity Grid Code. In support of the actual COD of the Asset-2, the Petitioner has submitted RLDC charging certificate dated 5.4.2021 certifying

that 400 kV PK Bari-II bay at Silchar Sub-station successful completed trial run operation on 12.3.2021 and CMD certificate as required under the Indian Electricity Grid Code.

19. We have considered the submissions of the Petitioner. The Petitioner has bifurcated the 400 kV D/C Silchar-PK Bari T/L to 400 kV D/C line (Circuit-I) at P.K. Bari (TBCB) end and Silchar (PGCIL) and 400 kV D/C line (Circuit-II) at P.K. Bari (TBCB) end and Silchar (PGCIL) end and claimed COD as 8.3.2021 and 13.3.2021 respectively. It is observed that one number of bay at Silchar end completed successful trial operation on 7.3.2021 and the other bay on 12.3.2021. However, it is observed that the transmission line associated with the Asset-2 was put into commercial operation only on 13.3.2021.

20. Regulation 3 of the 2019 tariff regulations, 'element' is defined as follows:

> *"(20) 'Element' means an asset which has been distinctively defined under the scope of the transmission project in the Investment Approval such as transmission lines including line bays and line reactors, substations, bays, compensation device, Interconnecting Transformers;"*

21. As per the above definition of element, an element can be treated as a separate only if it is distinctively defined in the Investment Approval. In the instant case, the 400 kV D/C Silchar-PK Bari Transmission line is shown as one element in the Investment Approval. However, the Petitioner has bifurcated the 400 kV D/C Silchar-PK Bari Transmission line into Ckt-I and CKt-II as seprate elements, which is not permissible as per the definition of element. Therefore, we are not inclined to approve the COD of the Asset-1 and Asset-2 separately. We treat the Ckt-I and Ckt-II, i.e., Asset-1 and Asset-2 as one combined asset and approve their COD as 13.3.2021, when the double circuit line alongwith bays have been completed and accordingly approve combined tariff for Ckt-I and Ckt-II of the 400 kV D/C

Silchar-PK Bari Transmission line.

22. It is observed that the Petitioner has constructed additional 400 kV D/C transmission line for about 11.220 km. However, the Petitioner has not submitted the RLDC charging certificate for the same. The Petitioner is directed to submit the RLDC charging certificate additional 400 kV D/C transmission line for about 11.220 km at the time of truing-up.

COD of Asset-3

23. The Petitioner has claimed the COD of the Asset-3 as 20.4.2021 under Regulation 5(2) of the 2019 Tariff Regulations. In this regard, the Petitioner has submitted that the shutdown for 132 kV Palatana-Surjamaninagar I and II was applied from 10.4.2021 to 17.4.2021 for enabling termination of 400 kV Palatana-Surjamaninagar transmission line at existing Loc No. 05 (Palatana side) and Loc No. 94 (Surjamaninagar side) . Consent for shutdown was, however not accorded by TSECL since it was desired by them to retain one circuit of existing 400 kV Palatana-Surjamaninagar (TSECL) Transmissions Line (charged at 132 kV) as per its original configuration and it was requested to Ministry of Power (MoP), for considering the case for keeping one circuit of 400 kV Palatana-Surjamaninagar (TSECL) Transmissions Line (charged at 132 kV) connected to Surjamaninagar (TSECL). During the meeting held on 18.5.2021 in presence of Member (Power System), Central Electricity Authority (CEA), North Eastern Regional Power Committee (NERPC), North Eastern Regional Load Dispatch Centre (NERLDC), Central Transmsision Utility of India Limited (CTUIL), PGCIL, and TSECL, it is was decided to keep one circuit of 400 kV Palatana-Surjamaninagar (TSECL) Transmissions Line (charged at 132 kV) and other circuit of 400 kV Palatana-

Surjamaninagar Transmissions Line to be shifted to 400/132 kV Surjamninagar (ISTS) Sub-station. The Petitioner has submitted that for enabling this and in view of technical requirements, special additional arrangement using ERS towers had to be made at site for retaining a connection between Pallatana (OTPC) and Surjamanainagar (TSECL). Eventually, after additional arrangements as per Minute of Meeting (MoM) dated 18.5.2021 were made, consent for shut down of the line was obtained from TSECL and approved by NERPC with effect from 25.6.2021 to complete the balance works. The line was charged and synchronized on 11.7.2021. The Petitioner has submitted that the line was ready for charging on 20.4.2021 but was finally charged and synchronized on 11.7.2021 and the delay was due to non-availability of shutdown of 132 kV Palatana-Surjamaninagar for termination of 400 kV Palatana- Surjamaninagar (ISTS) T/L at 400 kV bays at Pallatana (OTPC) and Surjamaninagar (ISTS) end.

24. Regulation 5(2) 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."

25. As per Regulation 5(2) of the 2019 Tariff Regulations, the COD of a transmission system or an element thereof may be approved if the said system has been prevented from being put to regular service for reasons not attributable to the transmission licensee. In the instant case, the Petitioner has claimed approval of the COD of transmission asset as 20.4.2021 under Regulation 5(2) of the 2019 Tariff Regulations, due to non-availability of shutdown of 132 kV Palatana-Surjamaninagar for termination of 400 kV Palatana-Surjamaninagar (ISTS) T/L at 400 kV bays at Pallatana (OTPC) and Surjamaninagar (ISTS) end.

26. In support of the proposed COD of 20.4.2021, the Petitioner has submitted provisional CEA certificate dated 30.6.2021 for energizing electrical Installations under Regulation 43 of the Central Electricity Authority (Measures Relating to Safety and Electric Supply) Regulations, 2010. As per Regulation 5(2) of the 2019 Tariff Regulations, the Petitioner has to submit trial operation certificate issued by the concerned RLDC for charging element with or without electric load. However, the Petitioner has not submitted 'no-load' RLDC charging certificate and the Petitioner has submitted that the trial run was completed on 12.7.2021.

27. NER-II TL vide its reply dated 14.9.2022 submitted that it is entitled to recover the transmission charges from the deemed COD of its respective assets through Point of Connection (PoC) pool mechanism, regardless of the Petitioner's liablility to pay.

28. NER-II TL has further submitted that it is entitled for payment of complete transmission charges in respect of Palatana bays, P. K. Bari Sub-station, and Surajmaninagar Sub-station, as the said bays and sub-stations were ready for execution on 27.1.2021 but could not be put into commercial operation on their respective CODs on account of delay in the execution of the upstream network of the Petitioner.

29. NER-II TL has submitted that the Petitioner has not complied with all the requirements for approving the COD as provided under Regulation 5(2) of the 2019 Tariff Regulations like RLDC idle Charging Certificate and CMD Certificate regarding readiness of the transmission asset, except for issue of 'notice' to the generating company. As per the first proviso of Regulation 5(2) of the 2019 Tariff Regulations, a 'notice' was to be issued by the Petitioner to the generating company one month before the COD claimed. Thus, 'issue of notice' is a statutory requirement as per the regulations. Further, it is a well settled principle that if a statute provides for a thing to be done in a particular manner, then it has to be done in that particular manner and not in any other manner.

30. We have considered the submissions of the Petitioner and NER-II TL. The Petitioner has sought COD of Asset-3 as 20.4.2021 under Regulation 5(2) of the 2019 Tariff Regulations due to nonavailability of shut-down of 132 kV Palatana-

Surjamaninagar for termination of 400 kV Palatana-Surjamaninagar (ISTS) Transmission Line at 400 kV bays at Pallatana (OTPC) and Surjamaninagar (ISTS) end. If approval of COD under 5(2) of the 2019 tariff Regualtioons, the petitioner has to submit the the following documents

> *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."*

31. In the instant case, the Petitioner has submitted provisional CEA Energisation certificate dated 30.6.2021 for charging of 400 kV Palatana- SM Nagar (ISTS) line and first time charging of 400 kV Palatana-Surajmaninagar (ISTS) circuit-I was approved by NERLDC on or after 11.07.2021 and the Petitioner finally completed successful trail operation on 12.07.2021.

32. It is observed that RLDC granted provisional approval for charging clearance of 400 kV Palatana-Surajmaninagar (ISTS) Circuit-I vide letter dated 11.7.2021, wherein it is mentioned that bunching of 400 kV Palatana-Surajmaninagar (ISTS) Circuit-I and Circuit-II has been done for 11.275 km at Surajmaninagar (ISTS) end. It is also observed that as per the RLDC Charging Certificate dated 27.7.2021, RLDC certified the trial run operation of 400 kV Palatana-Surajmaninagar (ISTS) Circuit-I on 12.7.2021 whereas the Petitioner has claimed the tariff for both the circuits i.e. Circuit-I and Circuit-II of 400 kV Palatana-Surajmaninagar (ISTS) T/L. We have gone through the minutes of the CEA held on 18.5.2021 under the

chairmanship of Member (Power System) meeting about up-gradation of 132 kV D/C Palatana (OTPC). The relevant extracts of the minutes held on 18.5.2021 are as follows:

> *"13. Member (Power System), CEA stated that as all the participants are agreeing to the proposal of charging only one circuit of Palatana – Surajmani Nagar (ISTS) line at 400 kV level till completion of 400/132kV level at Surajmani Nagar (TSECL), the same may be accepted. Other circuit may remain connected as Palatana – Surajmani Nagar (TSECL) 132kV line, till the time the 400/132kV level at Surajmani Nagar (TSECL) is ready. He suggested for close monitoring of the works of the substation by TSECL, so that their 400 / 132 kV substation is not further delayed. The issue should be discussed in NCT also.*
>
> *14. The suggestions made by Member (PS), CEA were agreed."*

33. As per the above decision of CEA, the Petitioner has charged one ckt of Surajmaninagar- Pallatana DC line at 400 kV level and the other circuit continues to be operated at 132 kV. Further, newly added 11.275 km of 400 kV D/C line (ckt1 and ckt2) at Surajmaninagar end has been bunched at Surajmaninagar and accordingly, the petitioner has claimed the tariff for both the circuits i.e. Circuit-I and Circuit-II.

34. We obseve that the Petitioner has submitted provisional CEA Energisation certificate dated 30.6.2021 for charging of 400 kV Palatana- SM Nagar (ISTS) line and first time charging of 400 kV Palatana-Surajmaninagar (ISTS) circuit-I was approved by NERLDC on or after 11.07.2021 and the Petitioner finally completed successful trail operation on 12.07.2021 ,therefore, the deemed COD of 20.04.2021 claimed by the Petitioner under 5(2) of 2019 Tariff Regulations is rejected.

35. Taking into RLDC charging certificate, we approve the COD of the 400 kV Palatana-Surajmaninagar (ISTS) Circuit-I and Circuit-II as 13.7.2021 .

Capital Cost:

36. Regulation 19 of the 2019 Tariff Regulations provides as follows:

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

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

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

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

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

(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
(c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;
(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

(4) The capital cost in case of existing or new hydro generating station shall also include:
(a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
(b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.

(5) The following shall be excluded from the capital cost of the existing and new projects:
(a) The assets forming part of the project, but not in use, as declared in the tariff petition;
(b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

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

37. The Petitioner has claimed the following capital cost in respect of the transmission assets and has submitted the Auditor's Certificate in support of the same:

(₹ lakh)

Asset	Approved cost (FR)	Expenditure up to COD	Projected expenditure				Estimated completion cost
			2020-21	2021-22	2022-23	2023-24	
Asset-1	1389.50	2921.69	414.57	873.27	262.24	-	4471.77
Asset-2	427.23	262.59	-	256.91	57.71	-	577.21
Asset-3	401.07	4292.87	-	1842.13	496.07	115.36	6746.43

38. The above capital cost has been considered as per Regulation 19 of the 2019 Tariff Regulations for the purpose of tariff computation.

Cost over-run

39. The Petitioner has submitted that the details of estimated completion cost vis-à-vis FR apportioned approved cost of the transmission assets which are as follows:

(₹ lakh)

Asset	Approved cost (a)	Estimated completion cost (b)	Cost Variation (c=b-a)
Asset-1	1389.50	4471.77	3082.27
Asset-2	427.23	577.21	149.98
Asset-3	401.07	6746.43	6345.36

40. The estimated completion cost of the transmission assets is much higher than the FR approved apportioned cost. The reasons given by the Petitioner for the increase in the capital cost of the transmission assets is as follows:

Asset-1:

(i) **Cost variation in the equipment cost including civil works:**
As per FR, the total additional 400 kV D/C line was envisaged as 3.18 km. However, during execution, mainly due to change in location of P.K. Bari S/s (under TBCB Scope), the said additional 400 kV D/C line has been necessitated to be more than 5 times of line length envisaged in FR. The said variation and based on actual site conditions encountered during execution of project, there is a substantial increase in estimated completion cost of the asset with respect to the apportioned approved cost. Further, FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts as a general practice. It is submitted that the cost estimate of the project is on the basis of December, 2017 price level.

(ii) **IDC (₹44.40 lakh decrease):**
Decrease in IDC is attributable to variation in rate of interest considered in FR with respect to Actuals, decrease in overall capital cost with respect to FR and deployment of funds based on actuals. It may be mentioned that in FR, IDC was calculated considering rate of interest for domestic loans @10.5%. However, in actual, the weighted average rate of interest of loans is around 8.80%. The actual IDC accrued upto COD has been considered at the time of claim of tariff.

(iii) **IEDC (₹130.82 lakh increase):**

In IA, 10.75% and 3% of equipment cost and civil Works has been considered for IEDC and Contingency respectively, whereas based on the actual expenditure under the subject head, IEDC has been claimed in the Auditor Certificate.

Asset-2:

(i) **Cost variation in the equipment cost including civil works:**

As per FR, the total additional 400 kV D/C line was envisaged as 3.18 km. However, during execution, mainly due to change in location of P.K. Bari S/s (under TBCB Scope), the said additional 400 kV D/C line has been necessitated to be more than 5 times of line length envisaged in FR. The said variation and based on actual site conditions encountered during execution of project, there is a substantial increase in estimated completion cost of the asset with respect to the apportioned approved cost. Further, FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts as a general practice. It is submitted that the cost estimate of the project is on the basis of December, 2017 price level.

(ii) **IDC (₹22.24 lakh decrease):**

Decrease in IDC is attributable to variation in rate of interest considered in FR with respect to Actuals, decrease in overall capital cost with respect to FR and deployment of funds based on actuals. It may be mentioned that in FR, IDC was calculated considering rate of interest for domestic loans @10.5%. However, in actual, the weighted average rate of interest of loans is around 6.22%. The actual IDC accrued upto COD has been considered at the time of claim of tariff.

(iii) **IEDC (₹11.20 lakh decrease):**

In IA, 10.75% and 3% of equipment cost and civil Works has been considered for IEDC and Contingency respectively, whereas based on the actual expenditure under the subject head, IEDC has been claimed in the Auditor Certificate.

Asset-3:

(i) **Cost variation in the equipment cost including civil works:**

As per FR, the total additional 400 kV D/C line was envisaged as 1 km. However, during execution, mainly due to change in location of Surajmaninagar Sub-station (under TBCB Scope), the said additional 400 kV D/C line has been necessitated to be more than 22 times of line length envisaged in FR. The said variation and based on actual site conditions encountered during execution of project, there is a substantial increase in estimated completion cost of the asset with respect to the apportioned approved cost. Further, FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts as a general practice. It is submitted that the cost estimate of the project is on the basis of December, 2017 price level.

(ii) **IDC (₹22.24 lakh decrease):**

Decrease in IDC is attributable to variation in rate of interest considered in FR with respect to Actuals, decrease in overall capital cost with respect to FR and deployment of funds based on actuals. It may be mentioned that in FR, IDC was calculated considering rate of interest for domestic loans @10.5%. However, in actual, the weighted average rate of interest of loans is around 5.95%. The actual IDC accrued upto COD has been considered at the time of claim of tariff.

(iii) **IEDC (₹11.20 lakh decrease):**

In IA, 10.75% and 3% of equipment cost and civil Works has been considered for IEDC and Contingency respectively, whereas based on the actual expenditure under the subject head, IEDC has been claimed in the Auditor Certificate.

41. The Petitioner vide affidavit dated 19.7.2022 has submitted the Revised Cost Estimate (RCE) approved by the committee on investment on projects in the 127th meeting held on 29.12.2021. The Petitioner has apportioned the capital cost of the

various assets based on RCE and the same is as follows:

(₹ in lakh)

Asset	Approved cost (FR)	Approved cost (RCE)	Expenditure up to COD	Projected expenditure				Estimated completion cost
				2020-21	2021-22	2022-23	2023-24	
Asset-1	1389.50	5082.01	2921.69	414.57	873.27	262.24	-	4471.77
Asset-2	427.23	617.34	262.59	-	256.91	57.71	-	577.21
Asset-3	401.07	7396.57	4292.87	-	1842.13	496.07	115.36	6746.43

42. The Petitoner vide affidavit dated 19.7.2022 has submitted that there is a variation of ₹108.79 crore (i.e. 490.70 %) from the approved cost of ₹22.17 crore. The Petitoner has further submitted that the reasons for the variation are increase in the cost of project by ₹1.74 crore (7.86%) on account of price varaiation, net increase of ₹23.56 crore (106.25%) due to increase in length of 400 kV D/C line at P. K. Bari end for termination of P. K. Bari-Silchar 400 kV P. K. Bari S/s from 2.10 km to 9.92 km, net increase of ₹56.08 crore (252.97%) due to revision of scope of the project, and due to variation on IDC and IEDC with the net increase of ₹4.35 crore (19.60%).

43. We have considered the submissions of the Petitioner. As compared with FR apportioned approved cost, the estimated completion cost of Asset-1, Asset-2 and Asset-3 has higher by about ₹3082.27 lakh, ₹149.98 lakh and ₹6345.36 lakh respectively. We have gone through the Form-5 submitted by the Petitioner, wherein the Petitioner has submitted the following reasons for increase in capital cost:

Particulars	Estimated expenditure (FR)	Actual cost including projected cost before cut-off date	Variation between actual cost and FR	Reasons for variation

Asset-1				
Transmission line	812.78	2393.25+967.28=3360.53	2547.75	As per FR, the total additional 400 kV D/C line was envisaged as 3.18 km. However, during execution, mainly due to change in location of P. K. Bari Sub-station (under TBCB scope), the said additional D/C line has been necessitated to be more than 3 times of line length envisaged in FR. The said variation and based on actual site conditions encountered during execution of project, there is a substantial increase in estimated completion cost of the asset with respect to apportioned approved cost.
Asset-2				
Transmission line	127.36	118.60+234.32=352.92	225.56	As per FR, the total additional 400 kV D/C line was envisaged as 3.18 km. However, during execution, mainly due to change in location of P. K. Bari Sub-station (under TBCB scope), the said additional D/C line has been necessitated to be more than 3 times of line length envisaged in FR. The said variation and based on actual site conditions encountered during execution of project, there is a substantial increase in estimated completion cost of the asset with respect to apportioned approved cost.
Asset-3				
Transmission line	296.35	4330.35+620.55=4950.9	2832.15	As per FR, the total additional 400 kV D/C line was envisaged as 1 km. However, during execution, mainly due to change in location of Surajmaninagar Sub-station (under TBCB scope), the said additional D/C line has been necessitated to be many times of line length envisaged in FR. The said variation and based on actual site conditions encountered during execution of project, there is a substantial increase in estimated completion

				cost of the asset with respect to apportioned approved cost.

44. From the above, it is observed that the main reason for cost variation of Asset-1, Asset-2 and Asset-3 are change in location of sub-stations due to which the transmission line length increased which lead to increase of capital cost towards transmission line.

45. The Petitioner has also submitted that the capital cost of the transmission assets is within the RCE and it is accorded by Board of Directors of the Petitioner, at an estimated cost of ₹13096 lakh including IDC of ₹78 lakh based on March 2021 price level. As per RCE, the estimated completion cost of Asset-1, Asset-2 and Asset-3 are within RCE cost. Accordingly, the increase in the capital cost of the transmission assets is allowed.

Time over-run

46. The Petitioner has submitted that the transmission project was scheduled to be put into commercial within 24 months from the date of Investment Approval (IA) matching with associated lines and sub-stations under TBCB. The SCOD of the project is 1.7.2020, against which Asset-1, Asset-2 and Asset-3 are put under commercial operation on 8.3.2021, 13.3.2021, 20.4.2021 with a time over-run of 250 days, 255 days and 294 days respectively.

47. The Petitioner has submitted that the MoP in its letter dated 27.7.2020 allowed the extension of SCOD by 5 months in case of all the inter-State transmission projects, which were under construction as on date of COVID-19 induced lockdown i.e. 25.3.2020 to mitigate the issues of disruption in supply chains and manpower, caused due to outbreak of COVID-19 pandemic.

Accordingly, MoP's letter dated 27.7.2020 is applicable in the instant case for granting extension to TSP/ transmission licensees for completion of the under construction inter-State transmission projects by additional 5 months. As per the revised SCOD of 1.12.2020, the details of time over-run in respect of transmission assets are as follows:

Assets	SCOD	COD	Time over-run
Asset-1	1.7.2020 (as per IA), 1.12.2020 (as per MoP Guidelines) *	8.3.2021	97 days
Asset-2		13.3.2021	102 days
Asset-3		20.4.2021 (Proposed)	140 days

**Ministry of Power (MoP) in the letter dated 27.7.2020 allowed an extension of Scheduled Commercial Operation Date (SCOD) by 5 months to mitigate the issues of disruption in supply chains and Man power, caused due to outbreak of COVID-19 Pandemic. The letter is applicable for all the Interstate transmission projects whose SCOD date is after date of Lockdown i.e., 25.3.2020.*

Time over-run in case of Asset-1 and Asset-2

48. The Petitioner has submitted that Asset-1 and Asset-2 are delayed due to COVID pandemic and the same is as follows:

(i) Due to outbreak of Coronavirus, posed the greatest potential for harm as unforeseen/ unplanned interruption or delay. The Petitioner faced a multitude of challenges as they navigated through largely uncharted territory with their projects experiencing highly unique and mounting risks from the effects of COVID-19.

(ii) Nationwide lockdown:

Phase-1: 25.3.2020-14.4.2020 (21 days)
Phase-2: 15.4.2020-3.5.2020 (19 days)
Phase-3: 4.5.2020-17.5.2020 (14 days)
Phase-4: 18.5.2020-31.5.2020 (14 days)
Unlock-1.0: 1.6.2020-30.6.2020 (30 days)
Unlock-2.0: 1.7.2020-31.7.2020 (31 days)
Unlock-3.0: 1.8.2020-31.8.2020 (31 days)
Unlock-4.0: 1.9.2020-30.9.2020 (30 days)

(iii) The lockdown restricted people from stepping out of their homes. All transport services road, air and rail were suspended, with exceptions for transportation of essential goods, fire, police and emergency services. Educational institutions, industrial establishments and hospitality services were also suspended. Services such as food shops, banks and ATMs, petrol pumps, other essentials and their manufacturing were exempted. The Home Ministry stated that anyone who fails to follow the restrictions can face up to a year in jail. The government locked down all the cities and restricted the movement from one place to another. The movement restriction affected the supply chain, transportation shortage, worker absenteeism due to illness/ quarantine/ migration labour shortages, which resulted in decrease in output and delayed all country wide ongoing projects.

(iv) Change in location of P. K. Bari Sub-station has led to increase in the line length by 376%, due to which the contract was amended and the allied contruction activities delayed the project for approximately 8 months.

(v) The execution in delay of project for around 2 months was due to protest against the Citizenship Amendment Bill, 2019 in Assam and Tripura.

(vi) The delay of 4 months was due to delay in material movement in view of crack in Dwar Ksuid Bridge and susequent weight restrcitions. The limitation pertaining to movement of construction supplies prevailed till the executionof additional 400 kV D/C Silchar-PK Bari T/L. A Public Interest Litigation was filed in the High Court of Meghalaya regarding the situation and the High Court was also monitoring the situation.

(vii) Monsoon in West Tripura and Cachar, Assam has resulted into execution of the project by 2 months.

Time over-run in case of Asset-3:

49. Apart from the above reasons pertaining to nationwide lockdown due to COVID-19 Pandemic, protest related to Citizenship Amendment Bill, and the heavy rainfall, the Petitioner has submitted the following reasons for delay in execution of Asset-3:

(i) Change in location of Surahamaninagar Sub-station has resulted into change in line length and subsequent extension of the project deadline by approximately 8 months.

(ii) During execution of the work scheme of 400 kV Palatana-Surjamaninagar has been changed multiple times in various meeting which has impact the work progress. Accordingly, the scheme was modified and Palatana-Surajmaninagar (TSECL) 400 kV D/C line (operated at 132 kV) was shifted to the 400/132 kV Surjamaninagar ISTS Sub-station to form 400 kV D/C Palatana-Surjamaninagar(ISTS) T/L.

(iii) Non availability of shutdown of 132 kV Palatana- Surjamaninagar for termination of 400 kV Palatana- Surjamaninagar(ISTS) TL at 400 kV bays at Pallatana (OTPC) and Surjamaninagar (ISTS) end.

50. NER-II TL has submitted that in abscene of the implementation agreement, in situtations where a transmission asset cannot be put under commercial use due to delay in execution of an inter-connected asset, the liablilty for the transmission charges during the period of mismatch arises on the Petitioner. In this regard, NER-II TL has referred to the Appellate Tribunal for Electrcity (APTEL) judgment dated

27.3.2018 in Appeal No. 390 of 2017, titled as Punjab State Power Corporation Limited (PSPCL) Vs. Patran Transmission Company Limited (PTCL) and judgment dated 18.1.2019 in Appeal No. 332 of 2016 (RAPP Judgment).

51. In response, the Petitioner has submitted that the legal position that no liability of transmission charges is to be imposed on licensee in absence of agreement has been settled by APTEL in Appeal No. 17 of 2019 (NRSS XXXI (B) Transmission Limited Vs. CERC and Ors.) and in Appeal Nos. 129 and 276 of 2020 (DMTCL Vs. CERC and Ors.) wherein it was held that in case the SCOD is extended due to *force majeure* events then it revokes all the tacit or explicit agreements made by the parties or system planning authorities regarding SCOD of transmission elements then SCOD is shifted to actual COD. As such no penalty can be imposed as it will be contrary to the relief provided to it i.e. extension of SCOD. Similarly, APTEL vide judgment dated 15.9.2022 in Appeal No. 109 of 2021 (PSTCL Vs. CERC and Ors.) has unequivocally held that in the absence of a contract, the liability towards transmission charges cannot be fastened on the transmission utility.

52. NER-II TL submitted that the Petitioner's project is based on Regulated Tariff Mechanism (RTM) and is governed as per the 2019 Tariff Regulations. As the 2019 Tariff Regulations, all expenditure on account of Change in Law and Force Majeure events is passed through to Dedicated inter-State Customers (DICs) as tariff (as part of capital cost) and is considered an 'uncontrollable factor' while deciding time over-run, cost over-run, IDC and IEDC of the project.

53. In response, the Petitoner has submitted that the liability to pay the transmission charges cannot be forced on the Petitioner only because under the

RTM mechanism, the compensation on account of *force majeure* gets complemented to the transmission tariff and it is incorrect to contend that the NRSS judgment is only applicable to transmission licensees under the TBCB regime but equally applies to RTM projects.

54. We have considered the submissions of the Petitioner and NER-II TL. As per the IA, the SCOD of the transmission project is 1.7.2020. As discussed above, the COD of the Asset-1, Asset-2 and Asset-3 is approved as 13.3.2021, 13.3.2021 and 13.7.2021. Accordingly, there is a time over-run of 255 days, 255 days and 377 days respectively.

55. The Petitioner has attributed the time over-run in case of all the transmission assets to COVID-19. The Petitioner has further submitted that in case of Asset-1 and Asset-2, it was due to problems in change in location of P.K. Bari Sub-station, delay due to Citizenship Amendment Bill (CAA), delay in material movement due to crack in Dwar Ksuid bridge and subsequent weight reduction and rain fall. Asset-3 is delayed due to change in location of Surajmaninagar Sub-station, multiple change in scheme, delay due to Citizenship Amendment Bill (CAA), rainfall, non-availability of shutdown of 132 kV Palatana-Surajmaninagar for termination of 400 kV Palatana-Surajmaninagar transmission line at 400 kV bays at Pallatana (OTPC) and Surajmaninagar end.

56. The MoP vide letter dated 27.7.2020, taking into consideration that the construction activities of transmission projects was severely affected by the first wave of COVID-19 pandemic, extended the SCOD of the transmission projects under construction on 25.3.2020 by five months. The relevant portion of the letter dated 27.7.2020 is as follows:

"Sub: Extension to TSP/Transmission Licensees for completion of under construction inter-State transmission projects
Sir,
I am directed to state that transmission utilities have pointed out that construction activities at various transmission project sites have been severely affected by the nationwide lockdown measures announced since 25th march, 2020 to contain outbreak of COVID-19 and have requested for extension of Scheduled Commercial Operation (SCOD) to mitigate the issues of disruption in supply chains and manpower, caused due to outbreak of COVID19 pandemic.
2. It has been, therefore, decided that; i. All inter-state transmission projects, which were under construction as on date of lock-down i.e. 25th March 2020, shall get an extension of five months in respect of SCOD ii. This order shall not apply to those projects, whose SCOD date was prior to 25th March 2020
iii. Start date of Long Term Access granted to a generator by CTU based on completion of a transmission line, whose SCOD is extended by 5 months due to COVID-19 as mentioned above at point(i), shall also be extended by 5 months."

57. In the present case, the transmission project of the Petitioner was under construction stage as on the date of lockdown i.e. 25.3.2020 and the SCOD of the transmission project was 1.7.2020 i.e. post 25.3.2020. Therefore, the dispensation provided by the MoP vide its letter dated 27.7.2020 is applicable in the instant case. Accordingly, the SCOD of the transmission project is considered as 1.12.2020. Inspite of the extension granted by MoP, there is time over-run of 102 days, 102 days and 224 days in case of Asset-1, Asset-2, and Asset-3 respectively, in terms of the revised SCOD.

58. With respect to Asset-1 and Asset-2, the Petitioner has submitted 8 months of delay was due to change in location of P.K Bari Sub-station (June, 2018 to November, 2018), the time over-run from December, 2019 to January, 2020 was due to anti CAA protests and the time over-run in September and October, 2020 was because of extended rainfall. The time over-run upto December 2020, for which the Petitioner has given reasons, is sub-sumed in the time over-run already condoned upto 1.12.2020 on account of COVID-19 pandemic.

59. As regards the time over-run beyond 1.12.2020, the Petitioner has submitted that about 4 months (October, 2020 to February 2021) is impacted on account of weight restriction due to crack in Dwar Ksuid Bridge. We have gone through the submissions of the Petitioner. In support, the Petitioner has submitted Court orders and press release of the transport department. The tower parts, conductors, and hardware fittings could not be transported due to the weight restrictions in Dwar Ksuid Bridge, which we are of the view is beyond the control of the Petitioner. Therefore, the time period from 1.12.2020 to upto 13.3.2021 (102 days) is also condoned.

60. The Petitioner has attributed the time over-run of 8 months in case of Asset-3 was due to change in location of Surajmaninagar Sub-station (June, 2018 to November, 2018), 8 months was due to multiple times change in scheme, from December, 2019 to January, 2020 due to anti CAA protests and the time over-run in September, and October, 2020 is because of extended rainfall . The time over-run upto December 2020, for which the Petitioner has given reasons, is subsumed in the time over-run already condoned upto 1.12.2020 on account of Covid-19 pandemic. Further, as stated above, the Petitioner has not explained the time over-run beyond the revised SCOD of 1.12.2020 upto 9.4.2021. In view of the above, time over-run beyond 1.12.2020 upto 9.4.2021 (130 days) in case of Asset-3 is not condoned.

61. The Petitioner, in respect of Asset-3 has also submitted that due to non-availability of shutdown of 132 kV Palatana-Surajmaninagar for termination of 400 kV Palatana-Surajmaninagar (ISTS) at 400 kV bays at Palatan (OPTC) and

Surajmaninagar (ISTS) end. The Petitioner has applied for shutdown from 10.4.2021 to 17.4.2021. The Petitioner has communicated various letters dated 20.4.2021, 23.4.2021, 5.5.2021 and 1.6.2021 and 6.7.2021. We are of the view that the time period from 10.4.2021 to 13.7.2021 (94 days) is due to non-availability of shutdown for connection of one circuit of Palatana-Surajmaningar and the same is beyond the control of the Petitioner and the same has been condoned.

62. Accordingly, the time over-run condoned/ not condoned in the aforesaid paragraphs in respect of the transmission assets is summarised as follows:

Assets	SCOD as per IA	Revised SCOD as per MoP letter dated 27.7.2020	COD	Time over-run (days)	Time over-run not condoned (days)
Asset-1	1.7.2020	1.12.2020	13.3.2021	102 days	-
Asset-2	1.7.2020	1.12.2020	13.3.2021	102 days	-
Asset-3	1.7.2020	1.12.2020	13.7.2021	224 days	130 days

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

63. The Petitioner has claimed IDC as per Auditor’s certificate and has also submitted IDC statement showing the loan wise IDC discharged up to COD and discharged after COD.

64. The Petitioner has submitted IDC computation statement which contains the name of loan, drawl date, loan amount, interest rate and interest claimed. The IDC is worked out based on the details given in the IDC statement. The allowable IDC has been worked out based on the information available on record. The IDC considered as on COD and summary of discharge of IDC liability up to COD and thereafter for the purpose of tariff determination is as follows:

(₹ in lakh)

Asset	IDC Claimed as per the Auditor's Certificate	Entitled IDC as on COD as worked out	IDC dis-allowed as on COD due to computation difference and time over-run	Un-discharged portion of entitled IDC as on COD	IDC allowed on cash basis as on COD
a	b	c	d=b-c	e	f=b-d-e
Combined Assets (Asset-1 and 2)	46.44	46.44	0.00	11.41	35.03
Asset-3	9.68	0.00	9.68	0.00	0.00

65. The Petitioner has claimed IEDC as per the Auditor's Certificate and considered the IEDC disallowed due to time over-run not condoned. The Petitioner has submitted that the IEDC mentioned in the Auditor's Certificate is on cash basis and was paid upto the COD. The details of claimed and allowed IEDC for the purpose of tariff determination is as follows:

(₹ in lakh)

Asset	IEDC claimed	IEDC allowed	IEDC disallowed
Combined Assets (Asset-1 and 2)	325.56	325.56	0.00
Asset-3	294.32	262.00	32.32

<u>Initial Spares</u>

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

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

67. The Petitioner has claimed following Initial Spares in respect of the transmission assets:

(₹ in lakh)

Asset	Parts	Plant and machinery cost for calculation of initial spares (A)	Initial Spares claimed	Ceiling limit	Initial Spares worked out	Excess	Balance available within criteria
			(B)	(C)	D = [(A-B)*C /(100-C)]	[B-D] If B>D	[D-B] If D>B
Asset- 1	Sub-station (GIS-Brownfield)	**180.81**	13.12	7	12.62	0.50	0.00
Asset- 2	Sub-station (GIS-Brownfield)	**167.20**	0.00	7	12.58	0.00	12.58
Asset- 3	Transmission Line	**6442.43**	56.81	1	64.50	0.00	7.69
Total (Project Level)	**Sub-station (GIS-Brownfield)**	**348.01**	**13.12**	**7**	**25.21**	**0.00**	**12.09**
	Transmission Line	**6442.43**	**56.81**	**1**	**64.50**	**0.00**	**7.69**

68. The Petitioner has prayed that the initial spares may be allowed on project level. We have considered the submissions of the Petitioner. In terms of the Appellate Tribunal for Electricity Laws (APTEL) judgment dated 14.9.2019 in Appeal No. 74 of 2017, Initial Spares are to be allowed as per the ceiling limit on overall project cost. APTEL vide judgement dated 14.9.2019 in Appeal No. 74 of 2017 held as follows:

> *"8.13…We do not agree with this methodology of restricting initial spares asset/element wise as adopted by the Central Commission. The Central Commission to have a prudence check on the initial spares, being restricted based on the individual asset wise cost initially, but subsequently ought to have allowed as per the ceiling limits on the overall project cost basis during the true-up."*

69. In terms of the above, Initial Spares are to be allowed as percentage of the project cost as a whole when all the transmission assets are combined. The transmission project was completed during 2019-24 tariff period and the overall project cost of the transmission assets is arrived at only in the 2024-29 tariff period. Therefore, Initial Spares are allowed on the basis of the overall project cost in the

2024-29 tariff period when all the transmission assets are combined and the overall project cost is arrived at.

70. It is observed that even though asset 1 and 2 consisites of transmission line and bays at Silchar end, however, the Petiitoner has not claimed any O&M expenses towards transmission line in case of Asset-1 & Asset-2. The Petitioner also has not claimed claimed any O&M expenses under substation in case of Asset-2. The Petitioner is directed to clarify that the intial spares claimed under Asset-1 is for two no.of 400 kV GIS bays at Silichar or only one of 400 kV GIS bay at Silichar at the time of truing-up.

71. It is noticed noticed that there is variation in the plant and machinery cost (excluding IDC, IEDC, land cost and cost of civil works) considered for computation of Initial Spares as per Auditor's Certificate and as per Form-13. We have considered the plant and machinery cost as per Auditor's Certificate for computation of Initial Spares. As submitted the details in affidavit dated 2.8.2022, the Petitioner has not claimed any Initial Spares for Asset-2. The Initial Spares claimed by the Petitioner for Asset-1 is restricted to ceiling limit of 7% and the Initial Spares claimed by the Petitioner for Asset-3 is within ceiling limit of 1% of transmission line.

72. Therefore, Initial Spares allowed in respect of the transmission assets for 2019-24 tariff period are as follows:

(₹ in lakh)

Asset	Parts	Plant and Machinery cost for calculation of initial spares (A)	Initial Spares Claimed by the petitioner	Norm (in %)	Allowable ceiling limit for Initial Spares admissible	Excess initial spares disallowed
			(B)	(C)	D = [(A-B)*C /(100-C)]	[B-D] If B>D

Asset- 1	Sub-station (GIS-Brownfield)	**180.81**	13.12	7	12.62	0.50
Asset- 3	Transmission Line	**6442.43**	56.81	1	64.50	0.00

73. Discharge of Initial Spares is as follows:

(₹ in lakh)

Asset	**P&M cost claimed by the Petitioner**	**Total spares claimed**	**Expenditure upto COD**	**Included in add cap during 2021-22**
1	2	3	4	5
Asset-1 and 2	180.81	13.12	9.81	3.31
Asset-3	6442.43	56.81	55.72	1.09

74. Initial Spare for the transmission project as a whole shall be considered at the time of true-up.

<u>The capital cost allowed as on COD is as follows:-</u>

	Capital cost claimed as per Auditor Certificate	**IDC disallowed due to computational difference and time over run**	**IDC undischarged as on COD**	**IEDC disallowed**	**Initial spares disallowed**	**Capital cost considered as on COD**
Asset-1&2	**3184.28**	**0.00**	**11.41**	**0.00**	**0.50**	**3172.37**
Asset-3	**4292.87**	**9.68**	**0.00**	**32.32**	**0.00**	**4250.87**

Additional Capital Expenditure (ACE)

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

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

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

(a) Undischarged liabilities recognized to be payable at a future date;

(b) Works deferred for execution;

(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23of these regulations;

(d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;

(e) Change in law or compliance of any existing law; and
(f) Force Majeure events:

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

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

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

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

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

76. The Petitioner has claimed the following ACE in respect of the transmission assets for 2019-24 period in accordance with the provisions of Regulation 24 of the 2019 Tariff Regulations on account of undischarged liability towards final payment for works executed and for works deferred for execution within the cut-off

date:

(₹ in lakh)

Asset	Projected expenditure				Total ACE claimed
	2020-21	2021-22	2022-23	2023-24	
Asset-1	414.57	873.27	262.24	-	1550.08
Asset-2	-	256.91	57.71	-	314.62
Asset-3	-	1842.13	496.07	115.36	2453.56

77. The Petitioner vide affidavit dated 2.8.2022 has submitted the package wise and vendor-wise details of ACE claimed in respect of the transmission assets during 2019-24 tariff period and the same is as follows:

(₹ in lakh)

Particulars (package /Vendor)	2020-21	2021-22	2022-23	2023-24
Asset-1				
Sterling and Wilson Limited (Transmission line)	414.57	490.23		
Omega Consultancy Services (Transmission line)	-	0.50	-	
Others	-	322.30	141.78	
JV of NHVS and KEC International Limited (Sub-station and PLCC)	-	17.54	1.95	
	414.57	873.27	262.24	
Asset-2				
Sterling and Wilson Limited (Transmission line)	-	234.32	55.19	
JV of NHVS and KEC International Limited (Sub-station and PLCC)	-	22.58	2.62	
Asset-3				
Unique Structures and towers Limited	-	610.11	305.05	526.16
Sterling and Wilson Limited (Transmission line)	-	47.94	23.97	7.99
Ripon Hossain	-	9.48	4.74	1.58
Sushanta Sengupta		10.07	5.03	1.68
Budhu Deb Barma		8.98	4.49	1.50
Miscellaneous		1.82	0.91	0.30
Bappi Malakar		0.72	0.36	0.12

Pallab Chakraborty		1.46	0.73	0.24
Sankar	-	1.10	0.55	0.18
Sanjoy Das	-	0.46	0.23	0.08
Compensation	-	1150.00	150.00	-

78. We have considered the submissions of the Petitioner. ACE claimed by the Petitioner is allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations, as it is towards undischarged liabilities recognised to be payable at a future date and balance work deferred for execution. Since the CODs of the Asset-1 is shifted to 13.3.2021, the Petitioner is directed to submit the revised Auditor Certificate at the time of true-up. ACE allowed for both the transmission assets is subject to true-up.

79. ACE allowed in respect of the transmission assets for 2019-24 tariff period is as follows:

(₹ in lakh)

Particulars	2020-21	2021-22	2022-23	2023-24
Asset-1				
ACE as per Auditor's Certificate allowed under Regulation 24(1)(a) of the 2019 Tariff Regulations towards undischarged liabilities recognised to be payable at a future date	-	93.70	119.98	-
ACE as per Auditor's Certificate allowed under Regulation 24(1)(b) of the 2019 Tariff Regulations towards balance work deferred for execution	414.57	779.57	142.27	-
ACE allowed in this order	414.57	873.27	262.25	-
Asset-2				
ACE as per Auditor's Certificate allowed under Regulation 24(1)(a) of the 2019 Tariff Regulations towards undischarged liabilities recognised to be payable at a future date	-	13.01	56.64	

ACE as per Auditor's Certificate allowed under Regulation 24(1)(b) of the 2019 Tariff Regulations towards balance work deferred for execution	-	243.90	1.07	-
Asset-3				
ACE as per Auditor's Certificate allowed under Regulation 24(1)(a) of the 2019 Tariff Regulations towards undischarged liabilities recognised to be payable at a future date	286.73	143.46	47.79	
ACE as per Auditor's Certificate allowed under Regulation 24(1)(b) of the 2019 Tariff Regulations towards balance work deferred for execution	-	1555.40	352.70	67.57

<u>Capital cost allowed as on 31.3.2024</u>

80. Based on the above, capital cost allowed as on COD, ACE in 2019-24 tariff period including discharged IDC and capital cost as on 31.3.2024 in respect of the transmission assets considered for the purpose of tariff determination for 2019-24 tariff period are as follows:

(₹ lakh)

Asset	Capital cost allowed as on COD	ACE allowed				Capital cost allowed as on 31.3.2024
		2020-21	2021-22	2022-23	2023-24	
Asset-1 & 2	3172.37	414.57	1141.09	319.95		3172.37
Asset-3	4250.87	-	1842.13	496.07	115.36	6704.43

<u>Debt-Equity ratio</u>

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

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

i. *where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:*

ii. *the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*

iii. *any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.*

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

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

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

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

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

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

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

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

82. The debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations and it is as follows:

<u>Combined Asset</u>

Funding	Capital Cost as on 1.4.2019 (₹ in lakh)	(In %)	ACE in 2020-24 (₹ in lakh)	(In %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(In %)
Debt	2220.66	70.00	1312.93	70.00	3533.59	70.00
Equity	951.71	30.00	562.68	30.00	1514.39	30.00
Total	**3172.37**	**100.00**	**1875.61**	**100.00**	**5047.98**	**100.00**

<u>Asset-3</u>

Funding	Capital Cost as on 1.4.2019 (₹ in lakh)	(In %)	ACE in 2021-24 (₹ in lakh)	(In %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(In %)
Debt	2975.61	70.00	1717.49	70.00	4693.10	70.00
Equity	1275.26	30.00	736.07	30.00	2011.33	30.00
Total	**4250.87**	**100.00**	**2453.56**	**100.00**	**6704.43**	**100.00**

Depreciation

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

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

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

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied.

Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

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

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

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

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

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

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

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

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

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

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

(8) In case of de-capitalization of assets in respect of generating station or unit

thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.

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

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

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

84. The IT equipment has been considered as part of the gross block and depreciated using WAROD (as placed at Annexure-II). WAROD has been worked out after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered as Nil, i.e. IT asset has been considered as 100 per cent depreciable. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed for the Combined Asset (Asset-1 and Asset-2) and Asset-3 is as follows:

Combined Asset

(₹ in

lakh)

	Particulars	2020-2021	2021-22	2022-23	2023-24
	Depreciation				
1	Opening Gross Block	3172.37	3586.94	4728.03	5047.98
2	Addition during the year 2019-24 due to projected ACE	414.57	1141.09	319.95	0.00
3	Closing Gross Block	3586.94	4728.03	5047.98	5047.98
4	Average Gross Block	3379.66	4157.49	4888.01	5047.98
5	Average Gross Block (90% depreciable assets)	3041.69	3741.74	4399.20	4543.18
6	Average Gross Block (100% depreciable assets)	0.00	0.00	0.00	0.00
7	Depreciable value (excluding IT equipment and software)	3041.69	3741.74	4399.20	4543.18
8	Depreciable value of IT equipment and software	0.00	0.00	0.00	0.00
9	Total Depreciable Value	3041.69	3741.74	4399.20	4543.18
10	Weighted average rate of Depreciation (WAROD) (in %)	5.2947	5.2925	5.2910	5.2907
11	Lapsed useful life at the beginning of the year (Year)	0	0	1	2
12	Balance useful life at the beginning of the year (Year)	35	35	34	33
13	**Depreciation during the year**	**9.31**	**220.03**	**258.63**	**267.08**
14	Cumulative Depreciation at the end of the year	9.31	229.35	487.97	755.05
15	Remaining Aggregate Depreciable Value at the end of the year	3032.37	3512.39	3911.23	3788.13

Asset-3

(₹ in lakh)

	Particulars	2021-22	2022-23	2023-24
	Depreciation			
1	Opening Gross Block	4250.87	6093.00	6589.07
2	Addition during the year 2019-24 due to projected ACE	1842.13	496.07	115.36
3	Closing Gross Block	6093.00	6589.07	6704.43
4	Average Gross Block	5171.94	6341.04	6646.75
5	Average Gross Block (90% depreciable assets)	4654.75	5706.94	5982.08

	Particulars	2021-22	2022-23	2023-24
6	Average Gross Block (100% depreciable assets)	0.00	0.00	0.00
7	Depreciable value (excluding IT equipment and software)	4654.75	5706.94	5982.08
8	Depreciable value of IT equipment and software	0.00	0.00	0.00
9	Total Depreciable Value	4654.75	5706.94	5982.08
10	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28
11	Lapsed useful life at the beginning of the year (Year)	0	0	1
12	Balance useful life at the beginning of the year (Year)	35	35	34
13	**Depreciation during the year**	**196.02**	**334.81**	**350.95**
14	Cumulative Depreciation at the end of the year	196.02	530.82	881.77
15	Remaining Aggregate Depreciable Value at the end of the year	4458.73	5176.11	5100.31

Interest on Loan (IoL)

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

> *"**32. Interest on loan capital:** (1) The loans arrived at in the manner indicated in regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.*
>
> *(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.*
>
> *(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.*
>
> *(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*

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

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

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

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

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

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

86. The Petitioner has submitted that tariff calculation for the 2019-24 period, IoL has been calculated on the basis of interest rates prevailing as on 1.4.2019 for the respective loans. The change in interest rate due to floating rate of interest applicable, if any, for the project needs to be claimed/adjusted over the tariff block of 5 years directly from the beneficiaries.

87. We have considered the submissions of the Petitioner. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the Combined Asset (Asset-1 and Asset-2) and Asset-3 for 2019-24 tariff period is as follows:

<u>Combined Asset</u>

(₹ in lakh)

	Particulars	2020-21	2021-22	2022-23	2023-24
	Interest on Loan				
A	Gross Normative Loan	2220.66	2510.86	3309.62	3533.59
B	Cumulative Repayments upto Previous Year	0.00	9.31	229.35	487.97
C	Net Loan-Opening (A-B)	2220.66	2501.54	3080.27	3045.61
D	Additions	290.20	798.76	223.97	0.00
E	Repayment during the year	9.31	220.03	258.63	267.08
F	Net Loan-Closing (C+D-E)	2501.54	3080.27	3045.61	2778.54
G	Average Loan (C+F)/2	2361.10	2790.91	3062.94	2912.07
H	Weighted Average Rate of Interest on Loan (in %)	6.15	6.15	6.15	6.15
I	**Interest on Loan (G*H)**	**7.56**	**171.67**	**188.39**	**179.11**

Asset-3

(₹ in lakh)

	Particulars	2021-22	2022-23	2023-24
	Interest on Loan			
A	Gross Normative Loan	2975.61	4265.10	4612.35
B	Cumulative Repayments upto Previous Year	0.00	196.02	530.82
C	Net Loan-Opening (A-B)	2975.61	4069.09	4081.53
D	Additions	1289.49	347.25	80.75
E	Repayment during the year	196.02	334.81	350.95
F	Net Loan-Closing (C+D-E)	4069.09	4081.53	3811.33
G	Average Loan (C+F)/2	3522.35	4075.31	3946.43
H	Weighted Average Rate of Interest on Loan (in %)	5.95	5.95	5.95
I	**Interest on Loan (G*H)**	**150.44**	**242.48**	**234.81**

Return on Equity (RoE)

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

Provided further that:

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

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

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

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

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

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

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

*"**31. Tax on Return on Equity:(**1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as*

the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

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

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."

89. We have considered the submissions of the Petitioner. The MAT rate applicable for 2019-20 for the purpose of RoE which shall be trued up with actual

tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the Combined Asset (Aseet-1 and Asset-2) and Asset-3 is as follows:

Combined Asset

(₹ in lakh)

	Particulars	2020-21	2021-22	2022-23	2023-24
	Return on Equity				
A	Opening Equity	951.71	1076.08	1418.41	1514.39
B	Additions	124.37	342.33	95.99	0.00
C	Closing Equity (A+B)	1076.08	1418.41	1514.39	1514.39
D	Average Equity (A+C)/2	1013.90	1247.25	1466.40	1514.39
E	Return on Equity (Base Rate) (in %)	15.50	15.50	15.50	15.50
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782
H	**Return on Equity (D*G)**	**9.91**	**234.26**	**275.42**	**284.43**

Asset-3

(₹ in lakh)

	Particulars	2021-22	2022-23	2023-24
	Return on Equity			
A	Opening Equity	1275.26	1827.90	1976.72
B	Additions	552.64	148.82	34.61
C	Closing Equity (A+B)	1827.90	1976.72	2011.33
D	Average Equity (A+C)/2	1551.58	1902.31	1994.03
E	Return on Equity (Base Rate) (in %)	15.50	15.50	15.50
F	MAT Rate for respective year (in %)	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782
H	**Return on Equity (D*G)**	**209.18**	**357.29**	**374.52**

Operation & Maintenance Expenses (O&M Expenses)

41. O&M Expenses claimed by the Petitioner in respect of the transmission assets for 2019-24 period are as follows:

Asset-1:

(₹ in lakh)

Particulars	2020-21	2021-22	2022-23	2023-24
Additional 400 kV D/C line (Circuit-I) at P.K. Bari	0.67	10.59	10.96	11.34
1 no 400 kV GIS bay	2.20	34.71	35.92	37.18

Asset-2

(₹ in lakh)

Particulars	2020-21	2021-22	2022-23	2023-24
Additional 400 kV D/C line (Circuit-II) at P.K. Bari	0.53	10.59	10.96	11.34
1 no 400 kV GIS bay	1.74	34.71	35.92	37.18

Asset-3

(₹ in lakh)

Particulars	2020-21	2021-22	2022-23	2023-24
11.709 KM additional 400 kV D/C line at Palatana and Surajmaninagar ends for termination of 400 kV D/C Palatana-Surajmaninagar line	-	10.48	11.44	11.84

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

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

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

Single Circuit (Twin & Triple Conductor)	*0.503*	*0.521*	*0.539*	*0.558*	*0.578*
Single Circuit (Single Conductor)	*0.252*	*0.260*	*0.270*	*0.279*	*0.289*
Double Circuit (Bundled conductor with four or more sub-conductors)	*1.322*	*1.368*	*1.416*	*1.466*	*1.517*
Double Circuit (Twin & Triple Conductor)	*0.881*	*0.912*	*0.944*	*0.977*	*1.011*
Double Circuit (Single Conductor)	*0.377*	*0.391*	*0.404*	*0.419*	*0.433*
Multi Circuit (Bundled Conductor with four or more sub-conductor)	*2.319*	*2.401*	*2.485*	*2.572*	*2.662*
Multi Circuit (Twin & Triple Conductor)	*1.544*	*1.598*	*1.654*	*1.713*	*1.773*
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	*834*	*864*	*894*	*925*	*958*
Gazuwaka HVDC Back-to-Back station (₹ lakh per 500 MW)	*1,666*	*1,725*	*1,785*	*1,848*	*1,913*
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	*2,252*	*2,331*	*2,413*	*2,498*	*2,586*
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	*2,468*	*2,555*	*2,645*	*2,738*	*2,834*
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	*1,696*	*1,756*	*1,817*	*1,881*	*1,947*
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	*2,563*	*2,653*	*2,746*	*2,842*	*2,942*

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

Provided further that:

i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff *period;*

ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;

iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW)shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);

iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;

v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and

vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three year

(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.

91. We have considered the submissions of the petitioner. The COD of the Asset-1 and Asset-2 has been approved as 13.3.2021 and COD of the Asset-3 has been approved as 13.7.2021. O&M Expenses allowed as per the norms specified in the 2019 Tariff Regulations in respect of the transmission assets are as follows:

(₹ in lakh)

Asset-1 and Asset-2 (COD considered: 13.03.2021)				
Particulars	2020-21	2021-22	2022-23	2023-24
11.220 KM Additional 400 kV D/C line (Circuit-I& II) at P.K. Bari	0.50	10.59	10.96	11.34
2 no.of 400 kV GIS bays Silichar	2.30	48.23	49.924	51.674

(₹ in lakh)

Asset-3 (COD considered: 13.07.2021)

Particulars	2020-21	2021-22	2022-23	2023-24
11.709 KM Additional 400 kV D/C line (at Palatana and Surajmaninagar ends for termination of 400 kV D/C Palatana-Surajmaninagar line	7.64	11.05	11.44	11.84

Interest on Working Capital (IWC)

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

> ***"34. Interest on Working Capital:*** *(1) The working capital shall cover:*
>
> *…...*
>
> ***(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:***
> *(i) Receivables equivalent to 45 days of annual fixed cost;*
> *(ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and*
> *(iii) Operation and maintenance expenses, including security expenses for one month.*
>
> *…..*
> *(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:*
>
> *Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.*
>
> *(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency."*
>
> ***"3. Definitions. -*** *In these regulations, unless the context otherwise requires:-*
>
> *'**Bank Rate**' means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;"*

93. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21, 10.50% (SBI 1-year MCLR

applicable as on 1.4.2020 of 7.00% plus 350 basis points) for 2021-22 and 2022-23 and 12.00% (SBI 1-year MCLR applicable as on 1.4.2023 of 8.50% plus 350 basis points) for 2023-24. The components of the working capital and interest thereon allowed for the transmission assets are as follows:

Combined Asset

(₹ in lakh)

	Particulars	2020-21	2021-22	2022-23	2023-24
	Interest on Working Capital				
A	Working Capital Maintenance Spares (15% of O&M Expenses)	6.63	7.23	7.49	7.75
B	Working Capital O&M Expenses (O&M Expenses for one month)	3.68	4.02	4.16	4.31
C	Working Capital Receivables (Equivalent to 45 days of annual transmission charges)	70.01	84.36	96.62	97.80
D	**Total Working Capital (A+B+C)**	**80.32**	**95.61**	**108.27**	**109.86**
E	Rate of Interest (in %)	11.25	10.50	10.50	12.00
F	**Interest on working capital (D*E)**	**0.47**	**10.04**	**11.37**	**13.18**

Asset-3

(₹ in lakh)

	Particulars	2021-22	2022-23	2023-24
	Interest on Working Capital			
A	Working Capital Maintenance Spares (15% of O&M Expenses)	2.31	1.72	1.78
B	Working Capital O&M Expenses (O&M Expenses for one month)	1.28	0.95	0.99
C	Working Capital Receivables (Equivalent to 45 days of annual transmission charges)	98.66	118.20	121.35
D	**Total Working Capital (A+B+C)**	**102.25**	**120.87**	**124.12**
E	Rate of Interest (in %)	10.50	10.50	12.00
F	**Interest on working capital (D*E)**	**7.71**	**12.69**	**14.89**

Annual Fixed Charges of the 2019-24 Tariff Period

94. The transmission charges allowed in for the transmission assets for the 2019-

24 tariff period are as follows:

Combined Asset

(₹ in lakh)

Particulars	2020-21	2021-22	2022-23	2023-24
Depreciation	9.31	220.03	258.63	267.08
Interest on Loan	7.56	171.67	188.39	179.11
Return on Equity	9.91	234.26	275.42	284.43
O&M Expenses	2.30	48.23	49.92	51.67
Interest on Working Capital	0.47	10.04	11.37	13.18
Total	**29.56**	**684.23**	**783.73**	**795.47**

Asset-3

(₹ in lakh)

Particulars	2021-22	2022-23	2023-24
Depreciation	196.02	334.81	350.95
Interest on Loan	150.44	242.48	234.81
Return on Equity	209.18	357.29	374.52
O&M Expenses	11.05	11.44	11.84
Interest on Working Capital	7.71	12.69	14.89
Total	**574.40**	**958.71**	**987.01**

Filing Fee and the Publication Expenses

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

License Fees and RLDC Fees and Charges

96. The Petitoner has recovery of licensee fee and RLDC fees and charges from the beneficiaries in terms of Regulation 70(3) and (4) of the 2019 Tariff Regulations.

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

Goods and Services Tax (GST)

98. 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, the same may be allowed to be recovered from the beneficiaries.

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

Security Expenses

100. The Petitioner has submitted that security expenses for the transmission assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC.

101. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses on a projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No.

260/MP/2020 has already approved consolidated security expenses from 1.4.2019 to 31.3.2024. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

102. The Petitioner has sought reimbursement of capital spares at the end of tariff period. The Petitioner's claim towards capital spares, if any, will be dealt in accordance with the provisions of the 2019 Tariff Regulations.

Sharing of Transmission Charges

103. With effect from 1.11.2020, sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (in short "the 2020 Sharing Regulations"). The Billing, collection, and disbursement of transmission charges shall be dealt in accordance with the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

104. To summarise:

Annual Fixed Charges allowed in respect of the transmission assets for 2019-24 tariff period in this order are as follows: **(₹ in lakh)**

Particulars	2020-21	2021-22	2022-23	2023-24
Combined Asset (Asset-1 and Asset-2)	29.55	684.05	783.53	795.29
Asset-3		574.40	958.71	987.01

105. This order disposes of Petition No. 167/TT/2022 in terms of the above findings and discussion.

Sd/-	Sd/-	Sd/-
(P. K. Singh)	**(Arun Goyal)**	**(Jishnu Barua)**
Member	**Member**	**Chairperson**

Combined Asset

Capital Expenditures as on COD/ 1.4.2019	Admissible Capital Cost as on 31.3.2019	Projected Additional capitalisation					Estimated Completion Cost as 31.3.2024	Rate of Depreciation as per Regulation 33	Depreciation as per Regulation			
		2020-21	2021-22	2022-23	2023-24	Total			2020-21	2021-22	2022-23	2023-24
Freehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
Lease hold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00
Transmission Line	2775.69	414.57	1095.62	315.00	0.00	1825.19	4600.88	5.28%	157.50	197.37	234.61	242.93
Sub-Station Equipments	349.22	0.00	41.70	4.55	0.00	46.25	395.47	5.28%	18.44	19.54	20.76	20.88
PLCC	47.46	0.00	3.77	0.40	0.00	4.17	51.63	6.33%	3.00	3.12	3.26	3.27
IT assets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.00%	0.00	0.00	0.00	0.00
Total	**3,172.37**	**414.57**	**1,141.09**	**319.95**	**0.00**	**1875.61**	**5,047.98**		**178.94**	**220.03**	**258.63**	**267.08**
									5.2947%	5.2925%	5.2910%	5.2907%

Asset-3

Capital Expenditures as on COD/ 1.4.2019	Admissible Capital Cost as on 31.3.2019	Projected Additional capitalisation				Estimated Completion Cost as 31.3.2024	Rate of Depreciation as per Regulation 33	Depreciation as per Regulation		
		2021-22	2022-23	2023-24	Total			2021-22	2022-23	2023-24
Freehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00
Transmission Line	4250.87	1842.13	496.07	115.36	2453.56	6704.43	5.28%	273.08	334.81	350.95
Sub-Station Equipments	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00
PLCC	0.00	0.00	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00
IT assets	0.00	0.00	0.00	0.00	0.00	0.00	15.00%	0.00	0.00	0.00
Total	**4,250.87**	**1842.13**	**496.07**	**115.36**	**2453.56**	**6,704.43**		**273.08**	**334.81**	**350.95**
								5.2800%	5.2800%	5.2800%