CENTRAL ELECTRICITY REGULATORY COMMISSION
New Delhi

Petition No. 85/TT/2023

Coram:

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

Date of Order: 19.09.2024

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for the determination of transmission tariff from COD to 31.3.2024 for 2 Nos. 400 kV GIS Line bays at Chamera Sub-station under "Northern Region System Strengthening-XLI (NRSS-XLI)."

And in the matter of:

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

Versus

1. **Ajmer Vidyut Vitran Nigam Limited,**
   Corporate Office, Vidyut Bhawan,
   Panchsheel Nagar, Makarwali Road,
   Ajmer-305004 (Rajasthan).

2. **Jaipur Vidyut Vitran Nigam Limited,**
   132 kV, GSS RVPNL Sub-Station Building,
   Caligiri Road, Malviya Nagar,
   Jaipur-302017 (Rajasthan).

3. **Jodhpur Vidyut Vitran Nigam Limited,**
   New Power House, Industrial Area,
   Jodhpur-342003(Rajasthan).

4. **Himachal Pradesh State Electricity Board Limited,**
   Vidyut Bhawan,Kumar House Complex Building II,
   Shimla-171004.

5. **Punjab State Power Corporation Limited,**
   The Mall, PSEB Head Office,
   Patiala-147001.

6. **Haryana Power Purchase Centre,**
   Shakti Bhawan, Sector-6,
   Panchkula (Haryana)-134109.

7. **Jammu Kashmir Power Corporation Limited,**
   220/66/33 kV Gladni SS SLDC Building,
   Narwal, Jammu.

8. **Uttar Pradesh Power Corporation Limited,**
   Shakti Bhawan, 14, Ashok Marg,
   Lucknow-226001.

9. **BSES Yamuna Power Limited,**
   B-Block, Shakti Kiran Building (Near Karkadooma Court),
   Karkadooma, 2nd Floor,
   New Delhi-110092.

10. **BSES Rajdhani Power Limited,**
    BSES Bhawan, Nehru Place,
    New Delhi.

11. **Tata Power Delhi Distribution Limited,**
    33 kV Sub-station Building,
    Hudson Lane, Kingsway Camp,
    North Delhi-110009.

12. **Chandigarh Administration,**
    Sector-9, Chandigarh.

13. **Uttarakhand Power Corporation Limited,**
    Urja Bhawan,
    Kanwali Road, Dehradun.

14. **North Central Railway,**
    Allahabad.

15. **New Delhi Municipal Council,**
    Palika Kendra, Sansad Marg,
    New Delhi-110002.

16. **Himachal Pradesh Power Transmission Corporation Limited,**
    HIMFED Bhawan, New ISBT Road,
    Panjari, Shimla-171005. …..**Respondent(s)**

Parties Present:
Shri Vivek Kumar Singh, PGCIL
Shri Nitish Kumar, PGCIL
Shri Shaida Dass, Advocate, HPPTCL

ORDER

The instant Petition has been filed by the Petitioner, Power Grid Corporation of India Limited, for the determination of transmission tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") for the period from COD to 31.3.2024 for 2 Nos. of 400 kV GIS Line bays at Chamera Sub-station (hereinafter referred to as "the transmission asset") under "Northern Region System Strengthening-XLI (NRSS-XLI)" (hereinafter referred to as "the transmission project").

2. The Petitioner has made the following prayers:

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

2) Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para –9 above.

3) Approve the DOCO of the asset under clause 5 (2) of Tariff Regulation'2019

4) Condone the delay and allow IDC/IEDC as claimed in the petition.

5) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8 above for respective block.

6) 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.

7) 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.

8) Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses separately.

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

10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

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

Background

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

a. The Investment Approval (IA) of the transmission project was accorded by the Competent Authority of the Petitioner on 3.1.2020 and communicated vide Memorandum No. C/CP/PA1920-10-0T-IA006 dated 7.1.2020, at an estimated cost of ₹2557.00 lakh, including an IDC of ₹98.00 lakh based on the June, 2019 price level.

b. The transmission project was discussed and agreed upon in the 40th Standing Committee Meeting (SCM) on Power System Planning of Northern Region held on 22.6.2018 and in the 45th Northern Regional Power Committee (NRPC) meeting held on 8.6.2019.

c. The scope of work covered under the transmission project broadly includes:

400/220 kV Chamera Pooling Station (Extn.)

- 400 kV Line Bays (GIS) : 2 Nos.

d. The transmission asset under the transmission project has been completed. The details of the scheduled date of commercial operation (SCOD), date of commercial operation (COD), and time over-run with respect to the transmission asset are as follows:

Name of Asset	SCOD	Proposed COD	Time-over-run
2 Numbers 400 kV GIS Line bays at Chamera Sub-station	2.5.2021	12.5.2022	375 days

4. The Respondents are Distribution Licensees, Railways, and Power Departments procuring transmission service from the Petitioner, are beneficiaries of the Northern Region.

5. The Petitioner has served a copy of 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 (the Act). Respondent No. 16, Himachal Pradesh Power Transmission Corporation Limited ("HPPTCL"), has filed its reply vide affidavit dated 30.4.2024 and has raised issues of time over-run of the associated transmission line and sharing of the transmission charges. The Petitioner has filed its rejoinder to the reply of HPPTCL vide affidavit dated 21.6.2024. The issues raised by HPPTCL and the clarifications thereto given by the Petitioner are considered in the subsequent paras of this order.

6. This order is issued considering the submissions made by the Petitioner in the Petition and subsequent affidavit dated 16.2.2024, HPPTCL's reply filed vide affidavit dated 30.4.2024 and the Petitioner's rejoinder to the reply of HPPTCL vide affidavit dated 21.6.2024. The hearing in the matter was held on 29.4.2024 and the order was reserved. However, the order could not be issued prior to Shri Arun Goyal, Member, demitting the office. Accordingly, the matter is listed for the 8.8.2024. During the course of the hearing, the representative of the Petitioner submitted that the pleadings had been completed in the matter, and arguments were heard, and requested the Commission to issue an order on the basis of the information already on record. Considering the submissions of the representative of the Petitioner, the Commission directed the parties to file their respective written submissions/notes of argument, if any, within a week's time with a copy to the other side. However, no written submission has been received from the parties.

7. Having heard the representatives of the Petitioner and the learned counsel for

HPPTCL and after perusing the material on record, we proceed to dispose of the Petition.

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

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

(₹ in lakh)

Particulars	2022-23 (pro-rata 324 days)	2023-24
Depreciation	76.55	94.96
Interest on Loan	63.68	73.65
Return on Equity	81.33	100.94
O&M Expenses	44.32	51.67
Interest on Working Capital	4.59	5.48
Total	**270.47**	**326.70**

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

(₹ in lakh)

Particulars	2022-23 (pro-rata 324 days)	2023-24
O&M Expenses	4.16	4.31
Maintenance Spares	7.49	7.75
Receivables	37.56	40.17
Total Working Capital	49.21	52.23
Rate of Interest (in %)	10.50	10.50
Interest on Working Capital	**4.59**	**5.48**

Date of Commercial Operation ("COD")

10. The Petitioner has claimed the COD of the transmission asset as 12.5.2022 under Regulation 5(2) of the 2019 Tariff Regulations as the associated Lahal-Chamera 400 kV Double Circuit (D/C) line under the scope of HPPTCL was not ready on 12.5.2022. In compliance with the directions of the Commission vide RoP dated 31.1.2024, the Petitioner vide affidavit dated 16.2.2024 has submitted that the transmission asset was made for the termination of the Lahal-Chamera 400 kV D/C line implemented by HPPTCL and the line was connected on 10.1.2023 without 24 hours of

continuous power flow due to unscheduled power generation and the load flow started on 1.4.2023. The Petitioner has placed on record the copy of the Trial-run Certificate.

11. The Petitioner has further submitted that the tentative COD of the associated transmission line was on 31.3.2021. Further, the status of the transmission line was discussed in various Joint Co-ordination Committee (JCC) meetings for the generation project in Northern Region. The Petitioner has submitted that as per Regulation 5(2) of the 2019 Tariff Regulations, 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 the Petition before the Commission for approval of the date of commercial operation of such transmission system or element thereof.

12. The Respondent, HPPTCL vide affidavit dated 30.4.2024 has made the following submissions:

a) On 2.4.2018, the contract for construction work of the 400 kV D/C Lahal-Chamera transmission line was awarded to the Contractor and the effective date of the contract was 1.6.2018. The aforesaid transmission line was scheduled to be completed within 24 months from the effective date, i.e., on 31.5.2020 and the Petitioner's system was scheduled to be commissioned on 2.5.2021.

b) The 400/220/33 kV GIS Sub-station at Lahal associated with 400 kV D/C Lahal-Chamera transmission line was completed on 30.6.2020, which included all the necessary works such as testing and commissioning, etc. HPPTCL was fully prepared from the Sub-station point of view in June, 2020. However, due to the reasons beyond the control of HPPTCL, the aforesaid transmission line was commissioned on 11.1.2023.

c) HPPTCL has submitted the following reasons for the delay in commissioning of 400 kV D/C Lahal-Chamera Transmission Line:

A. <u>Change in Route Alignment:</u>

Route alignment from T-94 to T-96 was changed due to disputes with land-owners. The decision to re-align the route was made after a meeting chaired by the Director (Projects) on 15.11.2019. Survey for re-routing was carried out in December, 2019 and approval for the re-routing was completed in the month of February, 2020. Further, the land acquisition and handing over of the tower was delayed by 4 months due to the Covid-19 Pandemic.

B. <u>Blockage of Road</u>

The approach road to locations T-97 to T-102 (6 Nos. of tower location) was damaged on 14.1.2020, causing a complete disruption of construction activity for approximately 3.5 months until clearance on 21.5.2020.

C. <u>Due to Inclement weather conditions</u>

The locations T-1 to T-60 were prone due to heavy snowfall and work was halted from 16.12.2019 to 15.2.2020 and thereafter in winter and monsoon seasons.

D. <u>Delay due to Covid-19 Pandemic</u>

The outbreak of Covid-19 caused a delay from 23.3.2020 to 6.5.2020 and, further from 6.6.2020 to 30.6.2020, impacting supplier deliveries, worker absenteeism, travel restrictions, and site operations due to social distancing measures on the job site.

E. <u>Non-finalization of Gantry Points</u>

The spotting of old T-111 and T-112 (Dead End Tower) could not be finalized till May, 2020 due to the non-finalization of the Terminal Sub-station Gantry of the Petitioner. Finally, a gantry was proposed in place of the locations T-111 and T-

112 and the check survey was approved on 29.5.2020. The delay on account of the non-finalization of gantry points is of 364 days i.e., 1 year from the date of hand over to the said location to Contractor M/s APAR.

F. Delay in Handing Over of Encumbrance-Free Tower Locations due to Public Disputes/ROW Issues

I. **Hindrances faced till October, 2020:** Land acquisition issues persisted, particularly, at locations T-35 to T-43, T-46 to T-55, T-59, T-60 and partially at locations T-76, T-77 and T-78 (24 locations) which led to the delay in construction owing to the disputes over compensation and legal interventions. In this regard, meetings of the Negotiation Committee were held on 18.10.2019 and 22.11.2019 with the land-owners. However, no consensus could be arrived at. Thereafter, an application was submitted to the Office of the District Magistrate (DM), Chamba and the same was decided in favour of HPPTCL, thereby allowing it to work.

II. **Hindrances faced till September, 2021:** Delays continued at certain tower locations (T-9, T-10, T-18, T-21, T-92, partially T-46 to T-55) and Gantry G-2 due to public disputes. The compensation issues with the land-owners obstructed tower erection and stringing activities at locations T-35 to T-44.

III. **Hindrances faced till COD, i.e., 11.1.2023:** The land-owners of location T-21 initially were reluctant to sell their land despite a favorable decision from the DC, Chamba. However, the purchase was finalized on 30.11.2021, after prolonged negotiations. Similarly, the land-owners of locations T-50 to T-55 (6 Nos. tower locations) demanded higher rates than circle rates, requiring an intervention by the District Administration, Chamba. Thereafter, a meeting was convened, which was chaired by the SDM (Civil) Chamba, to resolve the issue. Subsequently, police assistance was sought for handing over the land by March, 2022 but the tower T-51 was handed over on 22.5.2022. Further, towers T-50, T-51, T-52, T-53, T-54, and T-55 were erected with the police assistance on various dates, viz on 10.9.2022, 25.10.2022, 18.7.2022, 20.9.2022 and 12.9.2022, respectively. The break-up of the delay is as under:

S. No.	Tower No.	Event Started	Event finished	Delay (in days)
1.	TL-21	28.5.2018	10.6.2022	1474
2.	TL-50 to TL-55	28.5.2018	25.7.2022	1521

Other Reasons

13. HPPTCL has further submitted the following regarding the delay:

A. Delay due to the felling of 44 Numbers Green Trees of various species from T-27 to T-35:

44 green trees existed in the ROW which obstructed stringing work from T-27 to T-35. The DM Forest Corporation of Chamba awarded tender for their felling on 24.8.2022 which was completed on 10.10.2022, allowing stringing work to finish by 20.10.2022.

B. **Delay in approval of shut-downs of 220 kV S/C Budhil-Chamera line by NRLDC between T-08 and T-09:**

NRLDC denied shut-downs for the 220 kV S/C Budhil-Chamera line between T-08 and T-09 due to power shortages. Stringing occurred on a HOTLINE basis, finished on 20.10.2022.

C. **Delay due to stringing between Tower Locations T-13 to T-22:**

The District Administration Chamba and Bharmour halted all the major activities which completely stopped the transportation of tower line material, cement, sand, aggregate, etc. from the locations T-6 to T-8 and T-13 to T-22. These were the locations upstream from the main NH road. Even the new construction of Mindra Link Road, being constructed by HPPWD was also stopped completely during the above period and the work of transportation of tower line material was badly hit and could not be undertaken.

D. Besides, there were few forest tree species that existed between TL-13 to TL-14, TL 17 to TL-18 and TL-18 to TL-20, hindering the conductors laying and stringing work. These trees were not included in the original FCA case due to the sufficient clearance from bottom conductors but were actually hindering the laying and stringing work between the above mentioned spans which necessitated felling off the said trees. The trees between TL-13 to TL-14 were felled on 25.12.2022 and TL18 to TL-20 from 9.12.2022 to 15.12.2022.

E. Charging of 400 kV D/C Transmission Line Lahal-Chamera of HPPTCL:

HPPTCL requested approval of the charging of the 400 kV D/C transmission line on 1.12.2022, and approval from the Chief Electrical Inspectorate was received on 14.12.2022. Accordingly, HPPTCL vide application dated 15.12.2022 and subsequent correspondence with NRLDC/HPSLDC, initiated the process for completion of formalities for the charging of the said transmission line and the charging of the transmission line was completed on 11.1.2023.

14. HPPTCL has further submitted that the main reasons for the delay in COD of the associated downstream network i.e. Lahal-Chamera line were *Force Majeure* events which were beyond the control of HPPTCL. Therefore, the delay may be condoned w.e.f. 2.5.2021 to 10.1.2023.

15. In response, the Petitioner has submitted as follows:

a) A transmission licensee is required to be paid for the transmission asset being set up. The tariff recovery is not akin to a claim for the damages but goes towards servicing of the capital cost invested by the Petitioner in the construction of the transmission asset. Sections 61, 62 and 64 of the Act, 2003 provide for cost plus tariff determination, which means that all the reasonable costs and expenses incurred by the utilities along with a reasonable Return on Equity (RoE) should be paid to it. The 2019 Tariff Regulations, recognize a situation where the transmission asset of one licensee may be ready while the inter-connecting system of the other licensee may not be ready. A licensee that comes in time is entitled to seek a declaration of deemed COD under Regulation 5 of the 2019 Tariff Regulations. Further, the Commission has provided a regulatory framework qua mismatch in Regulation 13(12) of the 2020 Sharing Regulations w.e.f. 1.11.2020 which reads as follows:

> ***"13. Treatment of transmission charges and losses in specific cases:***
> *………………………………..*
>
> *(12) In case of a transmission system where COD has been approved in terms of proviso (ii) of Clause (3) of Regulation 4 of the Tariff Regulations, 2014 or Clause (2) of Regulation 5 of the Tariff Regulations, 2019 or where deemed COD has been declared in terms of Transmission Service Agreement under Tariff based Competitive Bidding, the Yearly Transmission Charges for the transmission system shall be:*
>
> *(a) paid by the inter-State transmission licensee whose transmission system is delayed till its transmission system achieves COD, or*
>
> *(b) paid by the generating company whose generating station or unit(s) thereof is delayed, till the generating station or unit thereof, achieves COD, or*
>
> *(c) shared in the manner as decided by the Commission on case-to-case basis, where more than one inter-State transmission licensee is involved or both transmission system and generating station are delayed."*

b) In view of the aforesaid Regulations, i.e., the 2020 Sharing Regulations and the 2019 Tariff Regulations, it is evident that wherever there is an issue of mismatch between two transmission licensees, then from the date of the deemed

COD (as allowed by the Commission) to the actual COD of the associated transmission line, the party which has delayed the COD has to pay the transmission charges for the said mismatch period. The said provisions are aimed at safeguarding the financial interest of the transmission licensee which has achieved COD on time and the transmission asset has been kept stranded for no fault on its part. The Petitioner has further submitted that HPPTCL's asset was to be commissioned by 31.5.2020 and the Petitioner's transmission asset was scheduled to be commissioned by 2.5.2021. Thus, the SCOD of the HPPTCL's asset was prior to that of the Petitioner. However, the 400 kV Lahal -Rajera line was charged and synchronized on 11.1.2023.

c) Due to the non-availability of the associated downstream network i.e. Lahal-Chamera 400 kV D/C line and upon the readiness of the transmission asset as certified by the CEA and RLDC, the instant Petition has been filed for the approval of COD as 12.5.2022 under Regulation 5(2) of the 2019 Tariff Regulations. Further, the downstream system was synchronized on 11.1.2023 and the successful trial operation of the line was completed on 2.4.2023. In view of the fact that HPPTCL's asset was synchronized on 11.1.2023 and the successful trial operation of the line was completed on 2.4.2023, which is much after the SCOD of HPPTCL's asset, i.e., 31.5.2020 and SCOD of the Petitioner's asset i.e. 2.5.2021, therefore, there is no merit in the submission of HPPTCL.

d) Based on the requirement and timeline of HPPTCL, the system was planned in the 40th SCM on Power System Planning of Northern Region held on 22.6.2018, wherein HPPTCL had requested the Committee to approve the proposal of the 2 Nos. 400 kV bays at the Petitioner's 400/220 kV Chamera Pooling Station under the Northern Region Strengthening Scheme and implemented the same accordingly.

e) Any force majeure event faced by HPPTCL in achieving its COD does not come in the way of the Petitioner's claim of COD under Regulation 5(2) of the 2019 Tariff Regulations and the 2020 Sharing Regulations. The Petitioner, as a transmission licensee, is entitled to be paid for the transmission asset that it is setting up.

f) The 400 kV D/C Lahel-Chamera transmission line is an intra-State transmission line and the Commission is not the appropriate forum for the determination of tariff and analysis of time over-run in the instant Petition.

g) The Petitioner has prayed to approve the COD of the transmission asset w.e.f. 12.5.2022, as all requisite procedures as laid down in the 2019 Tariff Regulations have been followed by the Petitioner as per the 2019 Tariff Regulations and allow the transmission charges as claimed.

16. We have considered the submissions of the Petitioner as well as HPPTCL and have gone through the record.

17. To redress the present controversy regarding the approval of COD, we deem it proper to refer to Regulation 5 of the 2019 Tariff Regulations which is extracted as under:

> *"**5. Date of Commercial Operation:** (1) The date of commercial operation of a generating station or unit thereof or a transmission system or element thereof and associated communication system shall be determined in accordance with the provisions of the Grid Code.*
>
> *(2) In case the transmission system or element thereof executed by a transmission licensee is ready for commercial operation but the interconnected generating station or the transmission system of other transmission licensee as per the agreed project implementation schedule is not ready for commercial operation, the transmission licensee may file petition before the Commission for approval of the date of commercial operation of such transmission system or element thereof:*
>
> *Provided that the transmission licensee seeking the approval of the date of commercial operation under this clause shall give prior notice of at least one month, to the generating company or the other transmission licensee and the long term customers of its*

transmission system, as the case may be, regarding the date of commercial operation:

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

(a) *Energisation certificate issued by the Regional Electrical Inspector under Central Electricity Authority;*
(b) *Trial operation certificate issued by the concerned RLDC for charging element with or without electrical load;*
(c) *Implementation Agreement, if any, executed by the parties;*
(d) *Minutes of the coordination meetings or related correspondences regarding the monitoring of the progress of the generating station and transmission systems;*
(e) *Notice issued by the transmission licensee as per the first proviso under this clause and the response;*
(f) *Certificate of the CEO or MD of the company regarding the completion of the transmission system including associated communication system in all respects.*

(3) The date of commercial operation in case of integrated mine(s), shall mean the earliest of —

a) the first date of the year succeeding the year in which 25% of the Peak Rated Capacity as per the Mining Plan is achieved; or
b) the first date of the year succeeding the year in which the value of production estimated in accordance with Regulation 7A of these regulations, exceeds total expenditure in that year; or
c) the date of two years from the date of commencement of production:

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

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

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

18. In terms of Regulation 5(2) of the 2019 Tariff Regulations, in case the transmission system or element thereof executed by a transmission licensee is ready for commercial operation but the inter-connected generating station or the transmission

system of another 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. Further, the Petitioner is required to give prior notice of at least one month to the transmission licensee regarding the declaration of COD.

19. The Petitioner has prayed for the declaration of COD for the transmission asset as 12.5.2022 under Regulation 5(2) of the 2019 Tariff Regulations. In support of the COD of the transmission asset, the Petitioner has placed on the record the copies of the CEA Energization Certificate dated 28.4.2022 issued in terms of Regulation 43 of the Central Electricity Authority (CEA) (Measures relating to Safety and Electric Supply) Regulations, 2010, 'No-load' RLDC Charging Certificate dated 6.7.2022, and the CMD Certificate as required under the Grid Code. The Petitioner, vide letter dated 1.4.2022, has issued prior notice of one month to HPPTCL and informed that its transmission asset will be ready for charging in the month of April 2022. In view of the requisite certificates as well as the procedure followed by the Petitioner in terms of Regulation 5(2) of the 2019 Tariff Regulations, we approve the COD of the transmission asset as 12.5.2022 under Regulation 5(2) of the 2019 Tariff Regulations.

<u>Capital Cost</u>

20. 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."

21. The Petitioner vide Auditor's Certificate dated 28.10.2022 has claimed the capital cost and projected Additional Capital Expenditure (ACE) in respect of the transmission asset incurred as on 12.5.2022, and the same is as follows:

(₹ in lakh)

FR approved cost	Cost upto proposed COD	ACE			Estimated completion cost 31.3.2025
		2022-23	2023-24	2024-25	
2557.07	1513.16	227.86	100.83	100.83	1942.68

<u>Cost over-run</u>

22. The Petitioner has submitted that the total approved cost of the transmission asset as per the IA is ₹2557.07 lakh and the estimated completion cost is ₹1942.68 lakh. Therefore, there is no cost over-run with respect to the transmission asset. The Petitioner, vide affidavit dated 16.2.2024, has submitted that cost variation with respect to the transmission asset is mainly on account of the bid price received through open

competitive bidding and decrease in IDC/IEDC. The item-wise cost variation of ₹614.39 lakh in the FR cost of ₹2557.07 lakh vis-à-vis estimated completion cost as on 31.3.2025 of ₹1942.68 lakh, is tabulated as follows:

(₹ in lakh)

Particulars	Approved cost(A)	Estimated completion cost(B)	Variation (B-A)	Reason for variation
Sub-station				
Site preparation	20.00	0.00	-20.00	As per actual site condition
Misc. civil works	196.5	185.39	-11.11	The price variation is on account of price received through open competitive bidding.
Switchgear (CT, PT, CB, Isolator etc.)	71.05	41.61	-29.44	
Automation	30.03	24.49	-5.54	
Main Equipment (GIS etc.)	701.05	684.19	-16.86	
Control, Relay & Protection Panel	32.02	35.21	3.19	
PLCC	31.38	31.66	0.28	
Outdoor/Indoor lighting & AC	31.58	23.50	-8.08	
Control Cables	65.1	14.62	-50.48	
Structure for switchyard	156.91	101.14	-55.77	
Erection	101.06	92.38	-8.68	
Total Substation Equipment's	**1436.68**	**1234.19**	**-202.49**	
Spares	303.18	255.43	-47.75	
Custom Duty	167.55	0.00	-167.55	As per actual tax paid to statutory authority.
Other Taxes & Duties, F&I	274.5	256.07	-18.43	
Establishment	216.8	193.50	-23.30	As per actual expenditure
Contingency	60.13	0.00	-60.13	
Interest During Construction (IDC)	98.23	3.49	-94.74	
Grand Total Cost	**2557.07**	**1942.68**	**-614.39**	

23. We have considered the submissions of the Petitioner. As compared to the FR cost, the estimated completion cost as on 31.3.2025 is less by ₹614.39 lakh. Since, the estimated completion cost of the transmission asset as on 31.3.2025 is less than the FR cost, there is no cost over-run with respect to the transmission asset.

Time over-run

24. As per the IA dated 3.1.2020, the SCOD of the transmission project was 16 months from the date of the IA. Accordingly, the SCOD of the transmission asset was 2.5.2021, against which it was put into commercial operation on 12.5.2022 with a delay of 375 days. The Petitioner has submitted that the time over-run in commissioning the transmission asset was due to the Covid-19 pandemic in the years 2020 and 2021 which had stalled the work for around 375 days. The Petitioner has submitted the detailed reasons for the time over-run, i.e., world-wide spread of Covid-19 pandemic and delayed clearance by CEA for the 400 kV GIS Line bays at Chamera Sub-station. The Petitioner has prayed for condonation of delay in the commissioning of the transmission asset as it was beyond its control and the same is covered by Regulation 22(2) of the 2019 Tariff Regulations.

25. We have considered the submissions of the Petitioner and have gone through the documentary evidence produced on record to justify the time over-run. The Petitioner has submitted the date of the IA as 3.1.2020 and the SCOD of the transmission asset as 2.5.2021. The Petitioner has sought approval of the COD as 12.5.2022 in terms of Regulation 5(2) of the 2019 Tariff Regulations and we have approved the COD of the transmission asset as 12.5.2022. Therefore, the time over-run comes to 375 days. The Petitioner has submitted that the main reason for the time over-run in the case of the transmission asset was the outbreak of the Covid-19 pandemic and subsequent lockdowns and restrictions imposed in the wake of the outbreak of the Covid-19 pandemic. The Petitioner has submitted that Covid-19 pandemic-related challenges, which included supplier delivery issues, delayed issuance of permits, travel restrictions, and loss of time or inefficiencies due to the need to practice social distancing on the job site, affected the implementation of the transmission asset.

26. It is noticed that the claim of the Petitioner is based on the Ministry of Power (MoP) circulars dated 27.7.2020 and 12.6.2021 providing an extension to those projects of 5 months and 3 months respectively. The relevant extracts of the MoP circular dated 27.7.2020 are 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 COVID-19 pandemic. 2. It has been, therefore, decided that;*
>
> *i) All inter-state transmission projects, which were under construction as on date of lockdown 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."*

27. The relevant extracts of the letter dated 12.6.2021 of the MoP, which provides for the extension of three months in respect of the SCOD for inter-State transmission projects, is as under:

> *"Sub: Extension to TSP/Transmission Licensees for completion of under construction inter-State transmission projects – reg.*
>
> *Sir,*
>
> *am directed to state that transmission utilities have approached this Ministry stating that construction activity at various transmission projects sites have been severely affected by the current second wave of COVID-19 pandemic and various measures taken by State/UT Governments to contain the pandemic; such as night curfew, imposition of section 144, weekend lockdown and complete lockdown. In this regard they have requested for extension of Scheduled Commercial Operation Date (SCOD) for the undergoing Transmission projects to mitigate the issues of disruption in supply chains and manpower, caused due to COVID-19 pandemic.*
>
> *2. The matter has been examined in the Ministry and it has been noted that unlike last year complete lock-down in the entire country, this time different States/UTs have ordered lock-down in their State/UTs as per their own assessments. Therefore, after due consideration, it has been decided that;*
>
> *i. All inter-state transmission projects, which are under construction with SCOD coming after 01 April 2021 shall get an extension of three (3) months in respect of their SCOD;*
> *ii. The commencement date of Long Term Access (LTA) to a generator by CTU based*

on completion of a transmission line, whose SCOD is extended by three (3) months due to COVID-19 as mentioned above at point(i), shall also be extended by three (3) months.

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

28. The Petitioner, vide RoP dated 31.1.2024, was directed to submit L2 network/PERT chart indicating activity-wise plan and actual date. The Petitioner vide affidavit dated 16.2.2024 has submitted the details of the same as under:

Sl. No.	Activity	Planned		Actual		Delay (days)
		Start	Finish	Start	Finish	
1	NOA	3.1.2020	3.3.2020	-	3.3.2020	-
2	Supplies	1.5.2020	28.2.2021	1.3.2021	15.3.2022	380
3	Civil Works & Erection	3.3.2020	30.4.2021	15.12.2020	31.3.2022	335
4	Testing and Commissioning	1.4.2021	2.5.2021	28.4.2022	10.5.2022	373

29. In terms of the above letters dated 27.7.2020 and 12.6.2021, the COD of the transmission asset was to be extended by five months in the case of the transmission projects that were under construction as on 25.3.2020 and by three months in the case of the transmission projects which were under construction with SCOD after 1.4.2021, respectively. As per the IA dated 3.1.2020, the SCOD of the transmission project is 2.5.2021 and the asset was under construction as on 25.3.2020 and on 1.4.2021. Therefore, the relief granted under the MoP's letter dated 27.7.2020 and letter dated 12.6.2021 is applicable to the Petitioner in the instant case. Accordingly, the revised scheduled COD is 2.1.2022. Therefore, the time over-run up to 2.1.2022 is condoned. The transmission asset was put into commercial operation on 12. 5.2022. Hence, there is time over-run of 129 days in the commissioning of the transmission asset beyond 2.1.2022. The Petitioner has not submitted valid justification and also not submitted any valid documentary evidence in support of time over-run beyond 2.1.2022. Therefore, we are not inclined to condone the time over-run from 2.1.2022 to 12.5.2022, i.e. 129 days.

30. The summary of the time over-run condoned/not condoned in respect of the transmission asset is as follows:

Schedule COD as per IA	Actual COD	Time overrun	Time overrun condoned	Time over- run not condoned
2.5.2021	12.5.2022	375 days	246 days	129 days

<u>Interest During Construction (IDC) and Incidental Expenditure During Construction (IEDC)</u>

31. The Petitioner has claimed the IDC for the transmission asset and has submitted the statement showing the IDC claim, discharge of IDC liability as on the COD and thereafter as under:

(₹ in lakh)

IDC as per Auditor's Certificate	IDC discharged up to COD	IDC discharged during 2022-23	IDC discharged during 2023-24
3.49	1.50	1.99	-

32. As discussed above in this order, we have partially condoned the time over-run in the commissioning of the transmission asset. Therefore, IDC on a cash basis up to the COD has been worked out based on the loan details given in the statement showing the discharge of IDC and Form-9C for the transmission asset.

33. We have considered the allowable IDC based on the information submitted by the Petitioner. The IDC amount of ₹1.50 lakh claimed and discharged up to the modified COD on HDFC bank borrowings has been allowed and the amount of IDC of ₹1.99 lakh claimed on bond LXIX which was drawn after the modified COD has been disallowed.

34. The IDC claimed and considered as on the COD and summary of discharge of IDC liability up to the COD and, thereafter, for the purpose of tariff determination subject to its revision at the time of truing up are as follows:

(₹ in lakh)

IDC as per Auditor's Certificate (A)	IDC disallowed due to time over-run not condoned / Computational error (B)	IDC Allowed (C)=(B)-(A)	Undischarged IDC (D)	IDC allowed as on COD (E)=(C)-(D)
3.49	1.99	1.50	0.00	1.50

35. The Petitioner has claimed the IEDC of ₹193.50 lakh for the transmission asset as per the Auditor's Certificate. The Petitioner has further submitted that the entire amount of IEDC for the transmission asset has been discharged up to the COD. As the time over-run for the transmission asset has not been completely condoned, IEDC has been disallowed on a proportionate basis. The details of the IEDC claimed as per the Auditor's Certificate, IEDC considered, disallowed, and discharged up to the COD are as follows:

(₹ in lakh)

IEDC claimed as per Auditor's Certificate (A)	IEDC disallowed due to time over-run not condoned (B)	IEDC Allowed (A)-(B)
193.50	29.03	164.48

Initial Spares

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

> *"**23. Initial Spares:** Initial spares shall be capitalised as a percentage of the Plant and Machinery cost, subject to 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%"*

37. The initial spares claimed by the Petitioner are as follows:

(₹ in lakh)

Particulars	**Plant and Machinery Cost for calculation of initial spares (a)**	**Initial Spares claimed (b)**	**Ceiling as per the Regulations (in %) (c)**	**Initial Spares worked out by Petitioner (d=c*(a-b)/(100-c)**	**Excess spares (e=b-d)**
Sub-station (including PLCC)	1745.69	255.43	7.00	112.17	143.26

38. The Petitioner has submitted that excess initial spares are procured on account of the system requirement for the smooth operation of the grid and prayed to allow the same under Regulation 76 (Power to Relax) of the 2019 Tariff Regulations. The discharge details of the initial spares are as follows:

(₹ in lakh)

Particulars	**Initial Spares**
Expenditure upto COD	233.09
Expenditure during 2022-23	14.37
Expenditure during 2023-24	7.98
Total	**255.43**

39. We have considered the submissions of the Petitioner. The excess initial spares of ₹143.26 lakh are disallowed. Out of the excess initial spares amounting to ₹143.26 lakh, the initial spares discharged during the FY 2022-23 and the FY 2023-24 amounting to ₹14.37 lakh and ₹7.98 lakh, respectively, have been disallowed from the respective ACE and the balance initial spares amounting to ₹120.92 lakh have been disallowed from the COD. It is noted that the Petitioner has mentioned an amount of ₹216.5 lakh towards civil works, whereas in the auditor's certificate dated 28.10.2022, the cost towards building and civil works is mentioned as ₹0.00 lakh. The Petitioner is directed to clarify

whether the civil works are included in the plant and machinery cost. If so, submit the reasons for including the same at the time of truing-up. Based on the submissions of the Petitioner, the same will be reviewed at the time of truing-up.

40. The details of Initial Spares provisionally allowed for the transmission asset are as follows:

(₹ in lakh)

Elements	**Plant and Machinery cost (A)**	**Initial Spares claimed (B)**	**Ceiling (in %) (C)**	**Initial Spares worked out** D = [(A-B)*C/(100-C)]	**Excess [B-D] if B>D**	**Initial Spares allowed**
Sub-station (GIS)	1745.69	255.43	7.00	112.17	143.26	112.17

41. Accordingly, the capital cost as on the COD, considered for the purpose of tariff computation in respect of the transmission asset is as follows:

(₹ in lakh)

Capital Cost claimed as on COD (Auditor's Certificate) (A)	**IDC disallowed due to time over-run not condoned / Computational difference (B)**	**Undischarged IDC as on COD (C)**	**IEDC disallowed (D)**	**Excess Initial Spares disallowed as on COD (E)**	**Capital Cost as on COD (F) = (A-B-C-D-E)**
1513.16	1.99	0.00	29.03	120.92	1361.22

Additional Capital Expenditure ("ACE")

42. 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

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

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

(b) Change in law or compliance of any existing law;

(c) Deferred works relating to ash pond or ash handling system in the original scope of work;

(d) Liability for works executed prior to the cut-off date;

(e) Force Majeure events;

(f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;

Raising of ash dyke as a part of ash disposal system.

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

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

(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;

(c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and

(d) The replacement of such asset or equipment has otherwise been allowed by the Commission."

43. The Petitioner has submitted that since the ACE incurred/ projected to be incurred is mainly on account of the balance/ retention payments, the same is claimed

under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. The Petitioner has claimed the capital cost as per the cash IDC discharged as on 31.3.2024, as under:

(₹ in lakh)

FR approved cost	Expenditure upto COD	ACE			Estimated completion cost as on 31.3.2025
		2022-23	2023-24	2024-25	
2557.07	1513.16	227.86	100.83	100.83	1942.68

44. The Petitioner, vide affidavit dated 16.2.2024, has submitted the detailed break-up of ACE as under:

(₹ in lakh)

Particulars	2022-23	2023-24	2024-25
Work deferred for execution under 24(1)(b) of the 2019 Tariff Regulations	200.94	0.00	0.00
Discharge of liability under 24(1)(a) of the 2019 Tariff Regulations	26.92	100.83	100.83
Discharge of IDC under 24(1)(a) of the 2019 Tariff Regulations	1.99	0.00	0.00
Total	**229.85**	**100.83**	**100.83**

45. We have considered the submissions of the Petitioner. The projected ACE is allowed under Regulation 24(1)(a) of the 2019 Tariff Regulations on account of the balance/ retention payment and under Regulation 24(1)(b) of the 2019 Tariff Regulations on account of the works deferred for execution. The details of the ACE allowed during the 2019-24 tariff period in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2022-23 (pro-rata for 324 days)	2023-24
ACE	227.86	100.83
Add: IDC Discharged	0.00	0.00
Less: Excess Initial Spare	14.37	7.98
ACE allowed in the instant order	**213.49**	**92.85**

46. The capital cost considered in respect of the transmission asset for the 2019-24 tariff period is as follows:

(₹ in lakh)

FR Approved cost	Capital cost considered as on approved COD	ACE		Estimated capital cost as on 31.3.2024
		2022-23	2023-24	
2557.07	1361.22	213.49	92.85	1667.56

Debt-Equity ratio

47. 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."

48. The Petitioner has claimed the debt-equity ratio of 70:30 as on the COD and for ACE after the COD. The debt-equity ratio of 70:30 has been considered in accordance with Regulation 18 of the 2019 Tariff Regulations. The details of the debt-equity ratio as on the COD and as on 31.3.2024 in respect of the transmission asset are as follows:

Funding	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	952.86	70.00	214.44	70.00	1167.30	70.00
Equity	408.37	30.00	91.90	30.00	500.27	30.00
Total	**1361.22**	**100.00**	**306.34**	**100.00**	**1667.56**	**100.00**

Depreciation

49. 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."

50. The depreciation has been worked out considering the admitted capital expenditure as on the COD and thereafter. The Weighted Average Rate of Depreciation (WAROD) placed as 'Annexure' to this order, has been worked out for the transmission asset as per the rates of depreciation specified in the 2019 Tariff Regulations. The depreciation allowed for the transmission asset is as follows:

(₹ in lakh)

	Particulars	**2022-23 (pro-rata for 324 days)**	**2023-24**
A	Opening Gross Block	1361.22	1574.71
B	Addition during the year 2019-24 due to projected ACE	213.49	92.85
C	Closing Gross Block (A+B)	1574.71	1667.56
D	Average Gross Block (A+C)/2	1467.97	1621.14
E	Average Gross Block (90% depreciable assets)	1467.97	1621.14
F	Average Gross Block (100% depreciable assets)	0.00	0.00
G	Depreciable value (excluding IT equipment and software) (E*90%)	1321.17	1459.03
H	Depreciable value of IT equipment and software (F*100%)	0.00	0.00
I	Total Depreciable Value (G+H)	1321.17	1459.03
J	Weighted average rate of Depreciation (WAROD) (in %)	5.30%	5.30%
K	Lapsed useful life at the beginning of the year (Year)	0.00	1.00
L	Balance useful life at the beginning of the year (Year)	25.00	24.00
M	**Depreciation during the year (D*J)**	**69.11**	**85.94**
N	Cumulative Depreciation at the end of the year	69.11	155.05
O	Remaining Aggregate Depreciable Value at the end of the year	1252.06	1303.98

Interest on Loan ("IoL")

51. 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.”

52. The Weighted Average Rate of Interest on Loan (WAROI) has been considered on the basis of the rate prevailing as on COD. The Petitioner has prayed that the change in interest rate due to the floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, will be considered at the time of truing-up. Therefore, the IoL is allowed in accordance with Regulation 32 of the 2019 Tariff Regulations for the transmission asset, and the same is

as follows:

(₹ in lakh)

	Particulars	**2022-23 (pro-rata for 324 days)**	**2023-24**
A	Gross Normative Loan	952.86	1102.30
B	Cumulative Repayments upto Previous Year	0.00	69.11
C	Net Loan-Opening (A-B)	952.86	1033.20
D	Additions due to ACE	149.44	65.00
E	Repayment during the year	69.11	85.94
F	Net Loan-Closing (C+D-E)	1033.20	1012.25
G	Average Loan (C+F)/2	993.03	1022.72
H	Weighted Average Rate of Interest on Loan (in %)	6.522	6.518
I	**Interest on Loan (G*H)**	**57.49**	**66.66**

Return on Equity ("RoE")

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

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

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

Provided that return on equity in respect of additional capitalization after cutoff date beyond the original scope, excluding additional capitalization on 7 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 ₹ 1,000 crore;
(b) Estimated Advance Tax for the year on above is ₹ 240 crore;
(c) Effective Tax Rate for the year 2019-20 = ₹ 240 Crore/₹ 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."

54. The Petitioner has submitted that since the MAT rate is applicable to it, the MAT rate applicable in the 2019-24 period for the respective financial years has been considered for the purpose of RoE, which will be trued-up in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE allowed for the transmission asset is as follows:

(₹ in lakh)

	Particulars	**2022-23 (Pro-rata for 324 days)**	**2023-24**
A	Opening Equity (A)	408.37	472.41
B	Additions (B)	64.05	27.85
C	Closing Equity (C) = (A+B)	472.41	500.27
D	Average Equity (D) = (A+C)/2	440.39	486.34
E	Return on Equity (Base Rate) (in %)	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782
H	**Return on Equity (D*G)**	**73.42**	**91.34**

<u>Operation & Maintenance Expenses ("O&M Expenses")</u>

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

Particulars	**2022-23 (pro-rata 324 days)**	**2023-24**
Sub-station: 400 kV GIS Sub-station		
Number of line bays	2	2
Norms	24.962	25.837
Total O&M Expenses	**44.32**	**51.67**

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

"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 (₹ Lakh per 500 MW) (Except Gazuwaka BTB)	*834*	*864*	*894*	*925*	*958*
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	*1666*	*1725*	*1785*	*1848*	*1913*
500 kV Rihand-Dadri HVDC bipole scheme (₹ Lakh) (1500 MW)	*2252*	*2331*	*2413*	*2498*	*2586*
±500 kV Talcher- Kolar HVDC bipole scheme (₹ Lakh) (2000 MW)	*2468*	*2555*	*2645*	*2738*	*2834*
±500 kV Bhiwadi-Balia HVDC bipole scheme (₹ Lakh) (2500 MW)	*1696*	*1756*	*1817*	*1881*	*1947*

±800 kV, Bishwanath-Agra HVDC bipole scheme (₹ Lakh)(3000 MW)	*2563*	*2653*	*2746*	*2842*	*2942*

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

Provided further that:

(i) the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi- pole scheme for the corresponding year of the tariff period;
(ii) the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
(iii) the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2500 MW)shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
(iv) the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;
(v) the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
(vi) the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

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

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:
Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification."

57. The O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations, and the same are as under:

(₹ in lakh)

Particulars	**2022-23 (pro-rata for 324 days)**	**2023-24**
Number of Bays	2	2
Norms for 400 kV GIS Bays	24.962	25.837

Particulars	2022-23 (pro-rata for 324 days)	2023-24
Total O&M Expenses	**44.32**	**51.67**

Interest on Working Capital ("IWC")

58. Regulations 34(1)(c), 34(3), 34(4) and 3(7) of the 2019 Tariff Regulations provide as under:

> ***"34. Interest on Working Capital:*** *(1) The working capital shall cover:*
>
> *……..*
>
> (c) ***For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:***
>
> *i. Receivables equivalent to 45 days of annual fixed cost;*
>
> *ii. Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and*
>
> *iii. Operation and maintenance expenses, including security expenses for one month.*
>
> *(2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:*
>
> *Provided that in case of new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.*
>
> *(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;"*

59. 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 10.50%.

60. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) on working capital considered is 10.50% (SBI 1 year MCLR applicable as on 1.4.2022 of 7.00% plus 350 basis points) for the FY 2022-23 and 12.00% (SBI 1 year MCLR applicable as on 1.4.2023 of 8.50% plus 350 basis points) for the FY 2023-24. The components of the working capital and interest allowed thereon for the transmission asset are as follows:

(₹ in lakh)

	Particulars	2022-23 (pro-rata for 324 days)	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for one month)	4.16	4.31
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	7.49	7.75
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	34.44	37.07
D	**Total Working Capital**	**46.09**	**49.13**
E	Rate of Interest (in %)	10.50	12.00
F	**Interest on Working Capital**	**4.30**	**5.90**

Annual Fixed Charges for the 2019-24 Tariff Period

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

(₹ in lakh)

	Particulars	2022-23 (pro-rata for 324 days)	2023-24
A	Depreciation	69.11	85.94
B	Interest on Loan	57.49	66.66
C	Return on Equity	73.42	91.34
D	O&M Expenses	44.32	51.67
E	Interest on Working Capital	4.30	5.90
F	**Total**	**248.64**	**301.51**

Filing Fee and the Publication Expenses

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

Licence Fee & RLDC Fees and Charges

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

64. The Petitioner has submitted that if GST is levied at any rate and at any point of time in future on charges of the transmission of electricity, the same has to be borne and additionally paid by the Respondent(s) to the Petitioner and the same will be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ Statutory authorities, and the same may be allowed to be recovered from the beneficiaries.

65. 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

66. The Petitioner has submitted that security expenses in respect of transmission asset are not claimed in the instant Petition, and it would file a Petition to claim them separately. We have considered the Petitioner's submissions. The Petitioner had claimed consolidated security expenses on a projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in FY 2018-19 in Petition No. 260/MP/2020. The Commission, vide order dated 3.8.2021 in Petition No. 260/MP/2020, approved 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 has become infructuous.

Capital Spares

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

Sharing of Transmission Charges

68. The Petitioner has submitted that the tariff of the transmission asset will be recovered on a monthly basis in accordance with Regulation 57 of the 2019 Tariff Regulations and will be shared by the beneficiaries in terms of the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (hereinafter referred to as "the 2020 Sharing Regulations").

69. The Respondent, HPPTCL has submitted that since the 400/220/33 kV GIS Sub-station at Lahal was completed on 30.6.2020 and the 220 kV portion of the said sub-station was commissioned in March 2020, to facilitate the power evacuation for the generator's projects through alternative means with effect from July, 2020. In the

absence of a permanent evacuation arrangement, from May, 2022 (i.e. COD at the Petitioner's end at Chamera for the bays of HPPTCL) to January, 2023 (COD of HPPTCL's 400 kV D/C Lahal-Chamera Transmission Line), HPPTCL ensured the evacuation of hydro power from Himachal Pradesh to the ISTS point at the 400/220 kV Chamera Pooling Station. This interim arrangement was supported by the various orders of the Uttarakhand Electricity Regulatory Commission (UERC) and the transmission charges for the usage of the said system were borne by the concerned utility including the State of HP. The details of various orders/documents are as under:

Petition No./Letter No.	Date of issuance of Order	Petitioners	UERC decision
31/2020	4.12.2020	HPPTCL & HPSEBL	Commission permitted Petitioners i.e. HPPTCL and HPSEBL, to utilize interim arrangement till 30.9.2021
29/2021 (Suo Moto)	30.6.2021		Commission issued directions regarding the recovery of transmission charges from HPPTCL/HPSEBL till 30.9.2021.
38/2021	17.1.2022	HPPTCL, HPSEBL & Bajoli Holi HPPL	Interim arrangement extended till 31.3.2022
13/2022	9.5.2022		Interim arrangement extended till 30.9.2022.
35/2022	10.11.2022		Interim arrangement extended till 31.12.2022
UERC letter dated 29.12.2022			Interim arrangement extended till 15.1.2023

70. HPPTCL has further submitted that the transmission project is developed by the Petitioner. Though regular arrangements could not be completed in timelines matching with the COD of the Petitioner, HPPTCL facilitated the transmission of 51 MW power into the Petitioner's ISTS system through alternative means. This benefited all the beneficiaries in the Northern Region. HPPTCL initiated evacuation arrangement before the SCOD of the Petitioner's system from June, 2020, i.e., from the date of the SCOD of the 400 kV HPPTCL transmission system. HPPTCL should not be charged for the non-utilization of 2 bays at the Chamera sub-station as the State of H.P. and the beneficiaries

have already borne the charges for the period (June, 2020 to 10.1.2023) while evacuating power through alternate arrangements. The charges for the said bays should be included under the PoC mechanism from the date of approval of the COD of the Petitioner’s system.

71. HPPTCL has further referred to Appeal No. 343/2018, wherein, the APTEL has set aside an order of the Commission and directed that the transmission charges for the subject ISTS system should be recovered under the express provisions of the TSA read with CERC Sharing Regulations. However, in the instant case, the delay in COD of the Petitioner’s bays and HPPTCL's 400 kV line did not obstruct the evacuation of power from HEPs ensuring effective utilization of the Petitioner’s transmission system by the generators and beneficiaries. Therefore, despite the availability of the 400/220/33 kV GIS Sub-station at Lahal since June, 2020, the delay in construction/commissioning of the 400 kV transmission line was due to the various factors beyond the control of HPPTCL. Since alternative evacuation arrangements were diligently provided, facilitating hydro-electric power evacuation, HPPTCL has requested for condonation of a delay from 12.5.2022 to 10.1.2023, and the Petitioner’s transmission asset may be included under the PoC mechanism from its COD.

72. In rebuttal, the Petitioner has submitted that in view of the 2020 Sharing Regulations and the 2019 Tariff Regulations, it is evident that wherever there is an issue of mismatch between two transmission licensees, then from the date of the deemed COD (as allowed by the Commission) to the actual COD of the associated transmission line (the party which has delayed the COD) has to pay the transmission charges for the said mismatch period. The said provisions are aimed at safeguarding the financial interest of the transmission licensee, which has achieved COD on time, and the asset has been kept stranded for no fault on the part of the Petitioner. Any liability that may be imposed

by the Commission due to a mismatch is in terms of the 2020 Sharing Regulations and its amendments, which have been notified after due public consultation process. In this regard, reliance has been placed on the APTEL's judgment dated 3.5.2023 in the matter of Fatehgarh Bhadla Transmission Company Limited v. Central Electricity Regulatory Commission & Ors (2023 SCC Online APTEL 16) wherein the APTEL observed that the object sought to be achieved by the Commission in introducing these provisions of the mismatch in the 2019 Tariff Regulations and the 2020 Sharing Regulations. The APTEL in paragraphs 75 and 76 of the above judgment dated 3.5.2023 had observed as under:

> *"75. Section 62(1)(b) of the Act requires the Appropriate Commission to determine the tariff in accordance with the provisions of the Act for transmission of Electricity. Under the said provision, the CERC approves the capital cost, incurred by the transmission licensee with respect to the subject project, up to the date of its commissioning (its commercial operation date or COD), which the transmission licensee is entitled to recover through its tariff, along with return on equity. PGCIL had filed tariff Petition No. 9/TT/2021 before the CERC, invoking its jurisdiction under Section 62(1)(b), seeking determination of transmission tariff / charges for its transmission project, including Asset-6, under Section 62 of the Act read with the 2019 Regulations. Its yearly transmission tariff was determined by the CERC for the five-year block period 2019 to 2024. The liability for payment of transmission charges could have been fastened upon the beneficiaries/consumers only after they start receiving power through the commissioned inter-connected transmission assets. The delay on the Appellant's part in commissioning its transmission asset had left the transmission asset of PGCIL stranded resulting in no power being transmitted to the consumers. As PGCIL could not be denied yearly transmission charges after their transmission asset had been commissioned, and as consumers could not be called upon to pay such charges as they had not been supplied power, the Appellant was fastened with the liability to pay transmission charges to PGCIL for the mismatch period i.e., from 27.09.2019 when the transmission asset of PGCIL was deemed to have been commissioned, till 30.07.2021 when the transmission asset of the Appellant was actually commissioned, i.e. the period of delay in commissioning the Appellant's transmission asset.*
>
> *76. Section 61 of the Act relates to tariff regulations, and thereunder the Appropriate Commission shall, subject to the provisions of the Act, specify the terms and conditions for the determination of tariff, and in doing so to be guided by clauses (a) to (i) thereunder. Clause (d) of Section 61 requires the Commission to be guided by the requirement of safeguarding consumers interest and, at the same time, ensure recovery of the cost of electricity in a reasonable manner. Regulation 6(2) of the 2019 Regulations and Regulation 13(2) of the 2020 Regulations seek to achieve this object. Thereby, PGCIL has been permitted to avoid suffering losses on its transmission asset being commissioned, and to recover the yearly transmission charges from the Appellant which had delayed commissioning of its transmission asset. Since the beneficiaries/consumers would receive electricity only after the Appellant's transmission asset is commissioned and ARPRL commissions its generating asset and evacuates power, the aforesaid Regulations safeguard their interests also, in not fastening liability on them for the Appellant's delay in commissioning its transmission asset."*

73. In view of the above, the Petitioner has submitted that since it has implemented the transmission asset, it is entitled to recover the transmission charges.

74. We have considered the rival submissions of the Petitioner and HPPTCL and have gone through the record. We are of the view that the 400 kV D/C Lahal-Chamera transmission line is a part of intra-State transmission system under the scope of HPPTCL. It is noticed that the Commission is not determining the tariff for the intra-State transmission line, i.e., 400 kV D/C Lahal-Chamera transmission line of HPPTCL. Therefore, the Petitioner may approach the concerned State Electricity Regulatory Commission for the determination of the tariff and its related issues of delay in its commissioning.

75. HPPTCL has submitted that an alternative arrangement was provided by HPPTCL due to which there was no bottleneck in the evacuation of power. In this regard, we deem it proper to refer to the 40th minutes of the SCM of NR held on 22.6.2018. The relevant extracts of the same are as follows:

> ***"26.0 Construction of 2 No. 400 kV bays at 400/220 kV Chamera Pooling Station of PGCIL under Northern Region System Strengthening scheme:***
>
> *26.1 CEA stated that in the 27th meeting of Standing Committee on Power System Planning of Northern Region held on 30.05.2009, it was decided that HPPTCL would establish a 400/220 kV substation at Lahal in the time frame of Kutehar HEP, which would be connected to Chamera Pooling Station by a 400 kV D/C line. HPPTCL vide their letter No HPPTC L/PIanning/CEA_Vol-VI/20 18-3215 dated 18.5.2018 has informed that HPPTCL has awarded the package of construction of 400 kV D/C line from Lahal to Chamera on 02.04.2018 and the line is scheduled to be completed by June, 2020. As the system comes under Northern Region System Strengthening and approved master plan of Ravi Basin, therefore, HPPTCL had requested the committee to approve the proposal of provision of 2 No. 400 kV Bays by PGCIL at 400/220 kV Chamera Pooling Station of PGCIL under Northern Region System Strengthening scheme.*
>
> *26.2 POWERGRID confirmed the availability of space for two nos. of 400 kV bays at Chamera 400/220 kV pooling station.*
>
> *26.3 After discussion, members agreed for the provision of two nos. of 400 kV bays at Chamera 400/220 kV pooling station for termination of Lahal-Chamera 400 kV D/c line (of HPPTCL) under ISTS."*

76. In view of the above discussions, it is observed that HPPTCL has informed all

concerned that the 400 kV D/C line from Lahal to Chamera is scheduled to be completed by June, 2020. Accordingly, the Petitioner has taken approval of its Board of Directors on 3.1.2020 with SCOD of the bays (GIS) at Chamera GIS Sub-station as 2.5.2021. We do not find any merit in the contentions of HPPTCL, hence the same are rejected.

77. As discussed above, the COD of the transmission asset is approved as 12.5.2022 under Regulation 5(2) of the 2019 Tariff Regulations as the associated downstream asset to be developed by the HPPTCL was not ready on the date of the approved COD.

78. The relevant extracts of the RLDC Charging Certificate submitted by the Petitioner are as follows:

Ref: NRLDC/SO/2022/NLC/11

Date: 06.07.2022

To,
CGM (AM),
POWERGRID CORPORATION OF INDIA LIMITED
Northern Region -II,
Jammu.

Subject: Confirmation of No load charging of 400kV Main Bays 409 and 410 at 400/220kV Chamba (PG).

References:

1. Submission of pre-charging formats A1-A5 and B1-B5 on date 25.04.2022, 26.04.2022 and 28.04.2022.
2. Submission of request letter and mail dated 11.05.2022 and 30.06.2022 for issuance of first time charging certificate.

Based on above references and records available with NRLDC, it is hereby confirmed that the following Transmission elements were charged for the first time as mentioned below:

S No.	Name of transmission element	NRLDC code	Date	Time of charging	Remarks
1	400kV Main Bay 409 of Lahal (HP) Line -1 at 400/220kV Chamba (PG)	NR2205-1573	10.05.2022	11:37	Bay was charged on No Load.
2	400kV Main Bay 410 of Lahal (HP) Line -2 at 400/220kV Chamba (PG)	NR2205-1576	10.05.2022	11:49	Bay was charged on No Load.

This letter is issued on the request of transmission licensee.

Yours faithfully,
A. Kumar
Alok Kumar
GM (SO), NRLDC

79. The relevant extracts of the SLDC Charging Certificate submitted by the Petitioner are as follows:

HIMACHAL PRADESH STATE LOAD DESPATCH CENTRE
(an Apex body)
GOVERNMENT OF HIMACHAL PRADESH

Annex-1

No. HPSLDC/ SLDC-07(Volume-10)/ 2022-23- 9828-29 Dated: 21-01-2023

To

The Senior Manager (Projects),
HPPTCL, PIU Lahal,
Chamba Zone (HP).
E-mail: smlahal.tcl@hpmail.in

Subject: Regarding issuance of certificate for successful first time charging and Commercial Operation of 400 kV D/C Transmission Line (Circuit -1 & Circuit-2) from 400/220 kV 2x315 MVA, Lahal Substation to 400/220 kV Chamera P.S. of PGCIL at Rajera along with associated Bays.

Reference: Letter No. HPPTCL/LHL/E-07/2022-23-1501-04, dated: 13.01.2023 received from Senior Manager (Projects), HPPTCL PIU Lahal, Distt Chamba Zone (HP) through e-mail dated: 13.01.2023.

Sir,

In context to above, it is brought out here that that this office had coordinated the process of first time charging and commercial operation of 400 kV D/C Transmission Line (Circuit -1 & Circuit-2) from 400/220 kV 2x315 MVA, Lahal Substation to 400/200 kV Chamera Pooling station of PGCIL at Rajera along with associated bays, approval for which were accorded by the NRLDC New Delhi vide Nos. NRLDC/ SO-1/2022/ 635, dated: 26.12.2022 and vide No. NRLDC/ SO-1/2022/ 638, dated: 31.12.2022.

In regards to above, it is intimated that as per event register available in this office and as per SOE provided by your office, the initial charging of switchgear equipment of 400/220/33 kV GIS Lahal were time stamped as under:

Sr. No.	Event Description	Date	Time
1.	Closing of Ckt. breaker of 400 kV Lahal -Rajera line Ckt-2 from PGCIL Rajera end.	10.01.2023	16:37 Hrs.
2.	Closing of Ckt. breaker of 400 kV Lahal -Rajera line Ckt-1 from PGCIL Rajera end.	10.01.2023	18:15 Hrs.
3.	Closing of Ckt. Breaker of 400 kV Main Bay 405 at Lahal end.	11.01.2023	15:38 Hrs.
4.	Closing of Ckt. Breaker of 400 kV Main Bay 407 at Lahal end	11.01.2023	16:06 Hrs.
5.	Closing of Ckt. Breaker of 400 kV Tie Bay 406 at Lahal end	11.01.2023	16: 31 Hrs.

In view of above, the initial charging of all the above- mentioned components of 400/220/33 kV GIS Lahal, Distt Chamba (HP) is certified and on the basis of documents submitted by your office on prescribed formats i.e. Format A, B and C, the certification for successful first time charging and Commercial Operation of 400 kV D/C Transmission Line (Circuit -1 & Circuit-2) from 400/220 kV 2x315 MVA, Lahal Substation to 400/200 kV Chamera P.S. of PGCIL at Rajera along with associated bays above is hereby confirmed by the HPSLDC.

Yours Sincerely,

Chief Engineer,
HP State Load Despatch Centre,
Govt. of H.P, Totu, Shimla-11.

80. As discussed above in this order, the COD of the transmission asset has been approved as 12.5.2022 in terms of Regulation 5(2) of the 2019 Tariff Regulations. Further, the entity responsible for execution of the downstream or upstream transmission system or a generating station, irrespective of the fact that it is affected by the force

majeure events, has to bear the transmission charges for the period of mismatch from the date of COD of the transmission asset to the COD of transmission asset/ scheme under its scope. In the instant case, the associated transmission line was ready on 11.1.2023. Therefore, we are of the view that the transmission charges of the transmission asset shall be borne by HPPTCL from the COD of the transmission asset, i.e., from 12.5.2022 upto 11.1.2023 and, thereafter, the transmission charges of the 400 kV GIS bays shall be recovered as per the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

81. The Petitioner in the present Petition has prayed for an interim tariff as per Regulation 10(3) of the 2019 Tariff Regulations. Since the tariff has been determined in this Petition for the 2019-24 period, the prayer of the Petitioner for an interim tariff has become infructuous.

82. To summarize:

a. AFC allowed in respect of the transmission asset for the 2019-24 tariff period is as follows:

(₹ in lakh)

2022-23 (pro-rata for 324 days)	**2023-24**
248.64	**301.51**

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

84. This order disposes of Petition No. 85/TT/2023 in terms of the above findings and discussions.

sd/-	**sd/-**	**sd/-**
(Harish Dudani)	**(Ramesh Babu V.)**	**(Jishnu Barua)**
Member	**Member**	**Chairperson**

ANNEXURE

Asset

(Rs. In lakhs)

Capex	**Admitted capital cost as on COD**	**Projected ACE**					**Admitted capital cost as on 31.3.2024**	**Depreciation Rate (in %)**	**Annual Depreciation**				
		2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**			**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Substation	1328.62	-	-	-	213.49	92.85	1634.96	5.28	-	-	-	75.79	83.87
PLCC	32.60	-	-	-	-	-	32.60	6.33	-	-	-	2.06	2.06
Total	**1361.22**	**-**	**-**	**-**	**213.49**	**92.85**	**1667.56**		-	-	-	77.85	85.94
								Avg. Gross Block	-	-	-	1467.97	1621.14
								WAROD (in %)	0.00	0.00	0.00	**5.30**	**5.30**