CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 325/TT/2023

Coram:

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

Date of Order: 31.03.2024

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for determination of transmission tariff from COD to 31.3.2024 for “Scheme to control fault level control at Wardha Sub-station” in Western Region.

And in the matter of:

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

Vs.

1. Madhya Pradesh Power Management Company Limited,
   Shakti Bhawan, Rampur, Jabalpur-482008.

2. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited,
   3/54, Press Complex, Agra-Bombay Road, Indore-452008.

3. Maharashtra State Electricity Distribution Company Limited,
   Hongkong Bank Building, 3rd Floor, MG Road,
   Fort, Mumbai-400001.

4. Gujarat Urja Vikas Nigam Limited,
   Sardar Patel Vidyut Bhawan, Race Course Road,
   Vadodara-390007.

5. Electricity Department, Government of Goa,
   Vidyut Bhawan, Panaji, Near Mandvi Hotel,
   Goa-403001.

6. Electricity Department,
   Administration of Daman & Diu,
   Daman-396210.

7. DNH Power Distribution Corporation Limited,
   Vidyut Bhawan, 66 kV Road, Near Secretariat Amli,
   Silvassa-396230.

8. Chhattisgarh State Power Distribution Company Limited,
   P.O. Sunder Nagar, Dangania, Raipur,
   Chhattisgarh-492013.

9. Maharashtra State Electricity Transmission Company Limited,
   Prakashganga, 6th Floor, Plot No. C-19, E-Block,
   Bandra Kurla Complex, Bandra (East), Mumbai-400051. **… Respondent(s)**

For Petitioner	:	Shri Pankaj Sharma, PGCIL Shri Zafrul Hasan, PGCIL
For Respondents	:	None

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited for the determination of transmission tariff from COD to 31.3.2024 of "Scheme to control fault level control at Wardha Sub-station" (hereinafter referred to as the "transmission asset") in Western Region under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations").

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

> *"1) Condone the delay in the commissioning of assets covered under this petition.*
> *2) Approve the Transmission Tariff for the tariff block 2019-24 block for the assets covered under this petition, as per para –8.0.*
> *3) Admit the capital cost including spares as claimed in the Petition and approve the Additional Capitalization incurred / projected to be incurred along with spares.*
> *4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8 above for respective block.*

5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.

6) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

7) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.

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

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

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

Background

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

a. The investment approval of the project was accorded by the competent authority, i.e. the Board of Directors of the Petitioner vide the Memorandum dated 16.1.2020 with an estimated cost of ₹5857 lakh, including Interest During Construction (IDC) of ₹333 lakh at June 2019 price level. Further, a revised cost estimate (RCE) of the project has been approved vide memorandum dated 9.11.2022 with an estimated cost of ₹6576 lakh including Interest During Construction (IDC) of ₹278 lakh at June 2022 price levels.

b. The scheme was agreed upon in the 34th WRPC meeting held on 28.7.2017. Subsequently, the scheme was discussed in the 37th ECM on transmission held on 20.9.2017, wherein it was decided that CTUIL shall make a presentation describing the complexities involved in the execution of the works through the TBCB route and the decision regarding the implementation of the scheme through TBCB or RTM by the Petitioner would be taken after the presentation by CTUIL in the next meeting of the

Empowered Committee. In view of the technical upgradation in the existing facility of the Petitioner, the subject scheme was agreed upon in the 2nd meeting of the Empowered Committee on Transmission (ECT) held on 6.8.2018, wherein it was decided that the scheme shall be implemented by the Petitioner under RTM.

c. The scope of work covered under "Scheme to control fault level control at Wardha Sub-station" in Western Region is as follows:

Sub-stations**:**

(ii) Split the 400 kV Wardha Sub-station into two sections, Section-A and Section-B, with the necessary switching arrangement.

(iii) 2 X 63 MVAr line reactors at Wardha end of Wardha-Warora Pool 400 kV D/C (quad) line to be used as bus reactors at Wardha Sub-station-section A (by using the two 400 kV bays which shall be vacant in Wardha Bus Section-A after shifting of Warora pool-Wardha 400 kV D/C line from Section-A to Section-B)

(iv) Connection of 12 Ohm fault limiting reactor between Bus Section A and Bus Section B of Wardha 400 kV Bus.

{Layout of Wardha 765/400 kV Sub-station is I type with two main Bus. Bus section A and B of one main Bus will be connected through 12 Ohm fault limiting reactor and Bus Section A and B in second main Bus will remain disconnected.}

(v) Necessary modifications at Wardha Sub-station, like changing some elements, including CTs, if those are not designed for 50 kA fault level.

Transmission line:

(vi) Disconnection of Koradi II-Wardha 400 kV (Quad) line and Warora-Wardha 400 kV (Quad) line from Wardha 400 kV bus and connecting the two lines at the outskirt of Wardha Sub-station so as to form Warora-Koradi II 400 kV (Quad) line

(vii) All necessary arrangements for the change in termination of Warora Pool-Wardha 400 kV D/C (Quad) line by disconnecting it from Wardha 400 kV Bus Section A and terminating in vacant 400 kV bays (of Warora and Koradi II 400 kV (Quad) lines of MSETCL) at Wardha 400 kV Bus Section B.

e. The entire scope of work under the transmission project has been completed and is covered in the instant petition.

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner.

6. The final hearing in this matter was held on 15.12.2023, and the order was reserved.

7. This order is issued considering the submissions made by the Petitioner in the petition, replies dated 19.1.2024 separately filed by Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No. 1 and Maharashtra State Electricity Distribution Company Limited (MSEDCL), Respondent No. 3 and separate rejoinders dated 25.1.2024 filed by the Petitioner in response to replies filed by the Respondents.

8. Having heard the learned counsels for the Petitioner and Respondents and perused the material on record, we proceed to dispose of the Petition.

DETERMINATION OF ANNUAL FIXED CHARGES FOR FY 2019-24 TARIFF PERIOD

9. The Petitioner has claimed the following transmission charges in respect of the transmission asset:

(₹ in lakh)

Particulars	**2022-23 (pro-rata 127 days)**	**2023-24**
Depreciation	90.08	302.59

Interest on loan	86.64	274.80
Return on equity	95.64	318.95
Interest on working capital	4.58	14.71
O&M Expenses	26.46	78.71
Total AFC	**303.40**	**989.76**

10. The Petitioner has claimed the following Interest on Working Capital (IWC) in respect of the transmission asset:

(₹ in lakh)

Particulars	**2022-23 (pro-rata for 127 days)**	**2023-24**
O&M Expenses	6.34	6.56
Maintenance Spares	11.41	11.81
Receivables	107.50	121.69
Total Working Capital	125.25	140.06
Rate of Interest (in %)	10.50	10.50
Interest on Working Capital	**13.15**	**14.71**
Pro-rata Interest on Working Capital	**4.58**	**14.71**

Date of Commercial Operation (COD)

11. The Petitioner has claimed the COD of the transmission asset as 25.11.2022. In support of the COD claim of the transmission asset, the Petitioner has submitted the CEA energization certificate dated 26.9.2022, the WRLDC charging certificate dated 21.11.2022, a self-declaration COD letter dated 24.11.2022 and the CMD's certificate.

12. We have considered the Petitioner's submissions, and taking into consideration the documents submitted by him , the COD of the transmission asset is approved as 25.11.2022.

Capital Cost

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

*"**19 Capital Cost:** (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.*
(2) The Capital Cost of a new project shall include the following:
(a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by

treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
(c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
(d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
(e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;
(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
(h) Adjustment of revenue earned by the transmission licensee by using the Asset-before the date of commercial operation;
(i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
(j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway.
(k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
(l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
(m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
(n) Expenditure on account of change in law and force majeure events; and
(o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
(3) The Capital cost of an existing project shall include the following:
(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
(c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
(4) The capital cost in case of existing or new hydro generating station shall also include:
(a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
(b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
(5) The following shall be excluded from the capital cost of the existing and new projects:

(a) The Asset-forming part of the project, but not in use, as declared in the tariff petition;
(b) De-capitalised Asset-after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:
Provided that in case replacement of transmission Asset-is recommended by Regional Power Committee, such Asset-shall be decapitalised only after its redeployment;
Provided further that unless shifting of an Asset-from one project to another is of permanent nature, there shall be no de-capitalization of the concerned asset.
(c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
(d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
(e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."

14. The Petitioner has submitted the Auditor's Certificate and has claimed the following capital cost as on COD and projected Additional Capital Expenditure (ACE):

(₹ in lakh)

Approved cost (FR)	**Approved cost as per RCE**	**Expenditure up to actual COD**	**Additional Capital Expenditure**			**Estimated completion cost**
			2022-23	**2023-24**	**2024-25**	
5857.00	6576.00	4479.09	825.21	712.58	105.56	6122.44

15. The Petitioner has submitted that there is an increase of ₹265.44 lakh in the estimated completion cost w.r.t. FR cost. However, the estimated completion cost is within the approved RCE cost, and there is no cost over-run. The item wise cost variation between FR approved cost and the estimated completion cost for the transmission line, as submitted by the Petitioner, is as follows:

<u>A) Transmission line</u>

a) **Increase in preliminary works, compensation (₹103.39 lakh):** The cost under this head increased due to an increase in tree and land compensation as per the assessment finalized by the revenue department.

b) **Increase in cost of transmission equipment (₹71.43 lakh):** The line length increased from 2.75 km envisaged in FR to 3.22 km as per actual execution, which led to an increase in the quantity of tower steel, conductor, insulator and other associated works. Further, the cost has slightly increased because the rate received in competitive bidding was higher than the cost envisaged in FR.

B) Sub-station

a) **Increase in sub-station equipment (₹305.57 lakh):** The Petitioner followed an open competitive bidding route, and the tender was awarded based on the lowest evaluated bidder. Further, the best competitive bid prices against tenders may happen to be lower or higher than the cost estimated depending upon prevailing market conditions.

b) As regards the variation in individual items in sub-station packages, the packages under the subject scope of works comprise a large number of items and the same are awarded through open competitive bidding. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items under the said package. Further, the lowest bidder can be arrived at based on the evaluation of the price on an overall basis and therefore, item-wise price variation vis-à-vis unit rate considered in FR estimates is beyond the control of the Petitioner. The variation in cost is attributable to variation in awarded cost received in competitive bidding w.r.t unit rates considered in FR.

C) Decrease in IDC (₹283.91 lakh)

The Petitioner has submitted that the decrease in IDC is attributable to variation in the rate of interest considered in FR v/s actuals, decrease in overall capital cost w.r.t. FR and deployment of funds based on actuals. Further, in FR, IDC was calculated assuming that the loans will be available from domestic sources @ 10.50%, subject to actuals. The actual IDC accrued up to COD has been considered in the Auditor certificate.

D) Increase in IEDC (₹68.16 lakh)

The Petitioner has submitted that as per investment approval, 10.75% and 3% of equipment cost have been considered for IEDC and contingency, respectively, whereas based on the actual expenditure under the subject head, IEDC has been considered in the Auditor certificate.

16. MSEDCL has made the following submissions in its reply:

a) The cost over-run of ₹265 lakh is solely on account of the Petitioner and, therefore, should not be allowed. Further, the Petitioner has failed to corroborate through documents the increase in tree and land compensation (₹103.39 lakh), and the same should also not be allowed.

b) The increase in the cost of transmission equipment (₹71.43 lakh) due to an increase in transmission line length should not be allowed. The Petitioner has failed to provide documents corroborating the actual increase in the price and, further, has not provided any details with respect to the rate received in competitive bidding. Hence, the claim of the Petitioner should not be allowed.

c) The increase in the cost of sub-station equipment (₹305.57 lakh), is due to a delay in conducting the bidding process and therefore the cost escalation should not be allowed.

d) The Petitioner has failed to provide any substantial proof with respect to the increase in IEDC. As per Regulation 21(5) of the 2019 Tariff Regulations, if there has been a delay in achieving the COD on the part of the transmission licensee, IEDC should be disallowed post SCOD, and liquidated damages are liable to be recovered by the said transmission licensee.

17. In response, the Petitioner has reiterated the reasons for the cost variation submitted in the petition.

18. We have considered the submissions of the Petitioner and MSEDCL. The estimated completion cost of the transmission asset is more than the FR cost by about ₹265.44 lakh. However, the estimated completion cost of the transmission asset is within RCE cost. The cost increase, when compared to the FR cost, is due to the increase in line length, the actual cost discovered through competitive bids is more than the cost envisaged in the FR, the increase in tree and land compensation and the increase in the IEDC. These are beyond the control of the Petitioner. Therefore, the increase in the estimated completion cost of the transmission asset is approved.

Time Over-run

19. The Petitioner has submitted that as per the Investment Approval, the transmission scheme was scheduled to be put into commercial operation within 27 months from the date of approval of the Board of Directors, i.e., 19.12.2019. Hence, the SCOD of the transmission asset was 18.3.2022. However, due to Covid-19 (1^{st} and 2^{nd} Wave) and delay due to RoW issues and non-availability of outage requested from MSETCL and CSPTCL, the transmission asset was put under commercial operation on 25.11.2022. Thus, there is a time over-run of 8 months and 7 days. The Petitioner has submitted the details in respect of time over-run.

Delay due to Worldwide COVID-19 Pandemic

20. The Petitioner has submitted that the Government of India had imposed a nationwide lockdown w.e.f. 25.3.2020 to 24.8.2020 due to outbreak of Covid-19 pandemic. Further, the

supply of raw materials was badly affected, and in turn, the manufacturing and supply of major equipment were affected. Most of the factories were non-operational due to the non-availability of labour and materials, and therefore, manufacturing of a few major equipment such as circuit breakers, CT, CVT, Cables, Tower Parts and other GIS and TL materials could not be taken up by the vendors due to lockdown and non-availability of labour. The Petitioner has submitted that the Air Core Series Reactor, which is a major equipment of the project, as being supplied from Europe (Austria), was delayed due to the severe COVID-19 pandemic in Europe and was supplied at the site in September 2021. The Petitioner has submitted that the project was also affected by the second wave of COVID-19, as the lockdown was again imposed by GoI, and several restrictions were imposed by the State Government on the movement of personnel and transportation of equipment. Further, it was submitted that severe restrictions were imposed between 1.4.2021 and 30.6.2021 on the movement of men and materials. Due to the severity of the second Covid Wave all the manufacturing (supply chains) and erection activities at the site were affected badly.

Delay due to RoW issues

21. The Petitioner has submitted that ten new foundations, erections and stringings were required to be done in the transmission lines for re-orientation works. There was severe resistance from the farmers at all 10 locations, and they were not allowed to do even survey works at the site. Even with best efforts to convince the farmers by paying appropriate compensation, the farmers refused to allow the construction activities. Even after multiple hearings held by the District Magistrate and subsequent orders issued by the District Magistrate in June 2021 asking the farmers not to obstruct the construction works, the farmers were reluctant to allow construction works at the site and prohibited any movements in their

farmlands. All the construction works were completed under police protection with great difficulty.

<u>Delay due to non-availability of outage from MSETCL and CSPTCL</u>

22. The Petitioner has submitted that the 400 kV Koradi Wardha and 400 kV Warora (MSETCL) to Wardha Transmission Lines, which were to be bypassed from Wardha, are pertaining to MSETCL. MSETCL did not allow an outage of these lines, which has affected erection and stringing activities as there were in line towers to be erected for bypassing. Further, MSETCL was reluctant to bypass their lines at Wardha due to the non-availability of the downstream network at Warora. With the involvement of CEA, WRLDC, WRPC and CTUIL, a contingent scheme was approved in a meeting dated 4.2.2022, and the Petitioner was instructed to carry out the contingency arrangement till MSETCL develops their downstream network at Warora. Even after approval of the contingent scheme, MSETCL did not allow the Petitioner's request for outage of their lines from February 2022 to July 2022. MSETCL started concurring for outages intermittently and progressively from July 2022 to November 2022, during which the construction works were completed, which resulted in delay.

23. MPPMCL has submitted that the SCOD of the asset was 18.3.2022, whereas the first Covid-19 wave was from 24.3.2020 to 30.6.2020, i.e. almost two years before the SCOD. Further, the second wave of Covid-19 was between April 2021 and June 2021, which was nine months before the SCOD. Therefore, it is not a valid reason for time over-run and, therefore. should be disallowed. MPPMCL submitted that the Petitioner had not submitted any correspondence substantiating the delay caused by farmers and therefore requested that the delay on account of the same should not be condoned. As regards the alleged delayed outage approval given by MSETCL and CSPTCL, MPPMCL has submitted that the Petitioner

has not impleaded both the parties and has not submitted the steps it took to co-ordinate with MSETCL and CSPTCL. Therefore, the Commission may not approve any delay on account of the same.

24. MSEDCL has submitted that delay due to Covid-19 should not be condoned as the Petitioner has already considered revised COD on account of it. The ROW issues and outage availability have to be factored in the total project approval time and, therefore, may not be considered. MSEDCL has further submitted that increase in cost due to increase in cost of equipment preliminary works, compensation, increase in IEDC is on account of the Petitioner and beneficiaries should not be saddled with the burden of this increase.

24. In response, the Petitioner, in its rejoinders to the replies filed by MPPMCL and MSEDCL, has reiterated the Petitioner's submissions with regard to time over-run.

25. We have considered the submissions of the Petitioner, MPPMCL and MSEDCL. We have also gone through the documentary evidence placed on record by the Petitioner justifying the time over-run. The SCOD of the transmission asset was 18.3.2022, against which the transmission asset was put into commercial operation on 25.11.2022. Accordingly, there is a time over-run of 252 days in the case of the transmission asset. The Petitioner has submitted that the transmission asset was delayed due to the Covid-19 pandemic, severe RoW issues, and delay due to the non-availability of outages from MSETCL and CSPTCL.

26. The Ministry of Power (MoP) vide letter dated 27.7.2020 has extended the SCOD in respect of the inter-State transmission project by five months due to the COVID-19 pandemic. The relevant portion of the letter dated 27.7.2020 is as follows:

> *"Sub: Extension to TSP/Transmission Licensees for completion of under construction interState transmission projects*
> *Sir,*
> *I am directed to state that transmission utilities have pointed out that construction activities at various transmission project sites have been severely affected by the nationwide lockdown*

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

27. The Ministry of Power (MoP) vide letter dated 12.6.2021 has further extended the SCOD of the inter-State transmission project by three months due to the COVID-19 pandemic. The relevant portion of the letter dated 12.6.2021 is as follows:

"Sub: Extension to TSP/Transmission Licensees for completion of under construction inter-State transmission projects – reg.
Sir,
I 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. As per the letter dated 27.7.2020, the transmission assets under construction as on 25.3.2020 shall get a five month extension of their SCOD, and as per the letter dated 12.6.2021, the transmission assets under construction as on 1.4.2021 shall get an extension of three months. As stated above, the scheduled COD of the transmission asset was 18.3.2022. The transmission asset was under construction as on 25.3.2020, and its SCOD was after

1.4.2021. Therefore, the relaxation given in the above two letters of MoP is applicable to the present case. Accordingly, in terms of the above letters dated 27.7.2020 and 12.6.2021, the COD has to be extended by five months and further by three months, respectively. The revised SCOD of the transmission asset is 18.11.2022, as per the said letters. Therefore, the time over-run up to 18.11.2022 is condoned. The transmission asset was put into commercial operation on 25.11.2022. Hence, there is seven days of time over-run beyond 18.11.2022. The Petitioner has not given any specific dates to substantiate its claim that the transmission asset was affected by RoW issues. Further, the period of time over-run due to the alleged delay in the grant of outages by MSETCL and CSPTCL has been subsumed in the extended SCOD of 18.11.2022. Therefore, the time over-run of seven days beyond 18.11.2022 is not condoned.

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

29. The Petitioner has submitted that the entire amount of IEDC covered under the instant petition has been discharged up to COD. The Petitioner further submitted that out of the total IDC of ₹49.09 lakh, the IDC discharged up to COD is ₹22.67 lakh and the balance IDC of ₹26.42 lakh will be discharged in 2022-23.

30. MSEDCL has submitted that in accordance with Regulation 21(5) of the 2019 Tariff Regulations, the IEDC post SCOD should be disallowed.

31. We have considered the submissions of the Petitioner and MSEDCL. Since the time over-run beyond seven days of SCOD has been not condoned, IDC amounting to ₹0.32 lakh is disallowed. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the transmission asset. As the time over-run of the instant transmission asset is partially condoned, a certain amount of IEDC has been disallowed in the case of the

instant transmission asset.. Accordingly, the details of IDC and IEDC allowed and disallowed is as follows:

(₹ in lakh)

IDC Claimed	IDC disallowed due to time over-run not condoned	IDC allowed	IEDC Claimed	IEDC disallowed due to time over-run not condoned	IEDC allowed
49.09	0.32	48.77	706.16	4.61	701.55

Initial Spares

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

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

33. The Petitioner has calculated allowable Initial Spares considering the asset under the brownfield category and has claimed initial spares as per the cost certified in the Auditor Certificate.

34. Initial Spares claimed by the Petitioner are as follows:

(₹ in lakh)

Head	Plant and Machinery cost for calculation of Initial Spares	Ceiling limit as per Regulations (in %)	Allowable Initial Spares	Initial Spares claimed	Excess Initial Spares
Sub-station	3376.03	6	202.56	502.1	299.54
Transmission line	1463.62	1	14.64	5.43	Nil

35. The Petitioner has submitted that the Initial Spares claimed under the sub-station exceed the allowable limits as per the 2019 Tariff Regulations. The Petitioner has also submitted that the nature of initial spares is peculiar and essential due to the use of a series reactors while splitting the main bus at Wardha, which requires more amount towards the spares. The Petitioner has claimed excess initial spares under Regulation 76 and Regulation 77 of the 2019 Tariff Regulations, i.e., “Power to Relax”.

36. MSEDCL has submitted that Petitioner should not be allowed excess Initial Spares under Power to Relax as it is discretionary and ought to be used only in rare situations when implementation of regulations becomes difficult. Further, the Petitioner has failed to submit any coherent reasons to justify time over-run and cost over-run and has requested to disallow all financial implications arising out of such delay so as to protect the interests of the beneficiaries and end consumers.

37. The Petitioner has reiterated its submissions in the petition and requested that the additional Initial Spares claimed by it be allowed.

38. We have considered the submissions of Petitioner and MSEDCL. We do not find any compelling reason to allow the additional Initial Spares claimed by the Petitioner by relaxing the provisions of the 2019 Tariff Regulations. Accordingly, Initial Spares are allowed as per Regulation 23(d) of the 2019 Tariff Regulations.

39. The Initial Spares allowed for the transmission asset are as follows:

Head	**Plant and Machinery cost for calculation of initial spares**	**Ceiling limit as per Regulations (in %)**	**Allowable Initial Spares**	**Initial Spares claimed**	**Initial Spares disallowed**
Sub-station	3376.03	6	202.56	502.1	299.54
Transmission line	1463.62	1	14.64	5.43	Nil

Capital cost allowed as on COD

40. Accordingly, the capital cost allowed for the transmission asset as on COD is as follows

(₹ in lakh)

Capital cost claimed till COD	Less: Undischarged liability	Less: IDC Disallowed	Less: IEDC Disallowed	Excess Initial Spares disallowed	Capital cost approved as on COD
5122.91	670.24	0.32	4.61	299.54	4148.20

Additional Capitalisation

41. The Petitioner has submitted that additional capital expenditure after the COD may be dealt with in accordance with the provisions of Regulation 24 of 2019 Tariff Regulations.

42. Regulation 24 of the 2019 Tariff Regulations provides as follows:

> *"24. **Additional Capitalization***
> *(1) The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*
> *a. Un discharged liabilities recognized to be payable at a future date;*
> *b. Works deferred for execution;*
> *c. Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;*
> *d. Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law; and*
> *e. Change in law or compliance of any existing law: and*
> *f. Force Majeure events:*
> *Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.*
> *(2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.*

43. The Petitioner has further submitted that the ACE claimed is mainly on account of Balance/ Retention payments, i.e. under Regulation 24(1)(a) and works deferred for execution,

i.e., under Regulation 24(1)(b). The detailed reasons towards additional capitalisation have been provided by the Petitioner in Form-7.

44. We have considered the submissions made by the Petitioner. We have disallowed the excess initial spares of ₹299.54 lakh discharged till COD. Accordingly, the ACE approved for the transmission asset is as follows:

(₹ in lakh)

Capital cost as on COD	ACE in 2022-23	ACE in 2023-24	Total
4148.20	851.63	712.58	5712.41

<u>Debt Equity Ratio</u>

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

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

i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.
Explanation.-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.
(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:
Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30%shall not be taken into account for tariff computation;
Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.
(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.
(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation."

46. The Petitioner has claimed a debt-equity ratio of 70:30, and the same has been considered in accordance with Regulation 18 of the 2019 Tariff Regulations. The details of the debt-equity as on COD and 31.3.2024 is as follows:

Particulars	Capital cost as on COD (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	2903.74	70.00	3998.69	70.00
Equity	1244.46	30.00	1713.72	30.00
Total	**4148.20**	**100.00**	**5712.41**	**100.00**

Depreciation

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

*"**33. Depreciation:** (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:*
Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.
(2) The value base for the purpose of depreciation shall be the capital cost of the Asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the Asset-for part of the year, depreciation shall be charged on pro rata basis.
(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

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

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

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

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

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

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

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

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

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

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

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

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

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

48. Depreciation is allowed for the transmission in accordance with Regulation 33 of the 2019 Tariff Regulations. The IT equipment has been considered as part of the gross block and depreciated using the Weighted Average Rate of Depreciation (WAROD). WAROD has been worked out and placed as Annexure-I, considering the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e., IT assets have been considered 100% depreciable. Depreciation allowed for the transmission assets for the 2022-24 period is as follows:

(₹ in lakh)

	Particulars	**2022-23 (pro-rata for 127 days)**	**2023-24**
A	Opening Gross Block	4148.20	4999.83
B	Addition during the year 2019-24 due to projected ACE	851.63	712.58
C	Closing Gross Block (A+B)	4999.83	5712.41
D	Average Gross Block (A+C)/2	4574.01	5356.12
E	Average Gross Block (90% depreciable assets)	4549.01	5303.49
F	Average Gross Block (100% depreciable assets)	25.00	52.63
G	Depreciable value (excluding IT equipment and software) (E*90%)	4094.11	4773.14
H	Depreciable value of IT equipment and software (F*100%)	25.00	52.63
I	Total Depreciable Value (G+H)	4119.11	4825.77
J	Weighted average rate of Depreciation (WAROD) (in %)	5.31	5.35
K	Lapsed useful life at the beginning of the year (Year)	0	0
L	Balance useful life at the beginning of the year (Year)	25	25
M	**Depreciation during the year (D*J)**	**84.48**	**286.51**
N	Cumulative Depreciation at the end of the year	84.48	370.99
O	Remaining Aggregate Depreciable Value at the end of the year	4034.63	4454.78

<u>Interest on Loan (IoL)</u>

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

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

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.
(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.
(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.
(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:
Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;
Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.
(5a) The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.
(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing".

50. The weighted average rate of interest of IoL has been considered on the basis of the rates prevailing as on COD for respective loans. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up.

51. IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the transmission asset for the 2022-24 period as follows:

(₹ in lakh)

	Particulars	**2022-23 (pro-rata for 127 days)**	**2023-24**
A	Gross Normative Loan	2903.74	3499.88
B	Cumulative Repayments up to Previous Year	0.00	84.48

	Particulars	2022-23 (pro-rata for 127 days)	2023-24
C	Net Loan-Opening (A-B)	2903.74	3415.40
D	Addition due to ACE	596.14	498.81
E	Repayment during the year	84.48	286.51
F	Net Loan-Closing (C+D-E)	3415.40	3627.70
G	Average Loan (C+F)/2	3159.57	3521.55
H	Weighted Average Rate of Interest on Loan (in %)	7.39	7.39
I	**Interest on Loan (G*H)**	**81.23**	**260.07**

Return on Equity (RoE)

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

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

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

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

Provided further that:

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

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

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

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

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

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

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

31. Tax on Return on Equity:*(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.*
(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:
Rate of pre-tax return on equity = Base rate / (1-t)
Where "t" is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.
Illustration-
(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:
Rate of return on equity = 15.50/(1-0.2155) = 19.758%
(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:
(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
(b) Estimated Advance Tax for the year on above is Rs 240 crore;
(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;
(d) Rate of return on equity = 15.50/ (1-0.24) = 20.395%.
(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis."

53. The Petitioner has submitted that the MAT rate is applicable to it. MAT rate applicable has been considered for the purpose of RoE which shall be trued up with actual tax rate in

accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the transmission asset for the 2022-24 period as follows:

(₹ in lakh)

	Particulars	**2022-23 (pro-rata for 127 days)**	**2023-24**
A	Opening Equity	1244.46	1499.95
B	Addition due to ACE	255.49	213.77
C	Closing Equity (A+B)	1499.95	1713.72
D	Average Equity (A+C)/2	1372.20	1606.84
E	Return on Equity (Base Rate) (in %)	15.50	15.50
F	Tax Rate applicable (in %)	17.472	17.472
G	Rate of Return on Equity (Pre-tax) (in %)	18.782	18.782
H	**Return on Equity (Pre-tax) (D*G)**	**89.67**	**301.79**

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

54. O&M Expenses claimed by the Petitioner for the transmission asset are as follows:

(₹ in lakh)

Particulars	**2022-23 (pro-rata for 127 days)**	**2023-24**
O&M Expenses	26.46	78.71

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

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

Particulars	***2019-20***	***2020-21***	***2021-22***	***2022-23***	***2023-24***
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	*45.01*	*46.60*	*48.23*	*49.93*	*51.68*
400 kV	*32.15*	*33.28*	*34.45*	*35.66*	*36.91*
220 kV	*22.51*	*23.30*	*24.12*	*24.96*	*25.84*
132 kV and below	*16.08*	*16.64*	*17.23*	*17.83*	*18.46*
Norms for Transformers (₹ Lakh per MVA)					
765 kV	*0.491*	*0.508*	*0.526*	*0.545*	*0.564*
400 kV	*0.358*	*0.371*	*0.384*	*0.398*	*0.411*
220 kV	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*
132 kV and below	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	*0.881*	*0.912*	*0.944*	*0.977*	*1.011*
Single Circuit (Bundled conductor with four sub-conductors)	*0.755*	*0.781*	*0.809*	*0.837*	*0.867*
Single Circuit (Twin & Triple	*0.503*	*0.521*	*0.539*	*0.558*	*0.578*

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Conductor)					
Single Circuit (Single Conductor)	*0.252*	*0.26*	*0.27*	*0.279*	*0.289*
Double Circuit (Bundled conductor with four or more sub-conductors)	*1.322*	*1.368*	*1.416*	*1.466*	*1.517*
Double Circuit (Twin & Triple Conductor)	*0.881*	*0.912*	*0.944*	*0.977*	*1.011*
Double Circuit (Single Conductor)	*0.377*	*0.391*	*0.404*	*0.419*	*0.433*
Multi Circuit (Bundled Conductor with four or more sub-conductor)	*2.319*	*2.401*	*2.485*	*2.572*	*2.662*
Multi Circuit (Twin & Triple Conductor)	*1.544*	*1.598*	*1.654*	*1.713*	*1.773*
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	*834*	*864*	*894*	*925*	*958*
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	*1,666*	*1,725*	*1,785*	*1,848*	*1,913*
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	*2,252*	*2,331*	*2,413*	*2,498*	*2,586*
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	*2,468*	*2,555*	*2,645*	*2,738*	*2,834*
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	*1,696*	*1,756*	*1,817*	*1,881*	*1,947*
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	*2,563*	*2,653*	*2,746*	*2,842*	*2,942*

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

Provided further that:

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

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

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

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

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

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

(b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.
(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:
Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.
"

56. The Petitioner has claimed O&M Expenses as per Regulation 35(3) of the 2019 Tariff Regulations. The O&M Expenses approved for the transmission asset is as follows:

(₹ in lakh)

Particulars	2022-23 (pro-rata for 127 days)	2023-24
O&M Expenses	26.46	78.70

Interest on Working Capital (IWC)

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

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

58. The Petitioner submitted that it computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on COD of the Project. The Petitioner has considered the rate of IWC as 10.50%.

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

(₹ in lakh)

Particulars	**2022-23 (Pro-rata for 127 days)**	**2023-24**
Working Capital for O&M Expenses (O&M Expenses for one month)	6.34	6.56
Working Capital for Maintenance Spares (15% of O&M Expenses)	11.41	11.81
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	101.41	115.72
Total Working Capital	119.15	134.33
Rate of Interest for working capital (in %)	10.50	12.00
Interest on working capital	**4.35**	**16.12**

Annual Fixed Charges for 2022-24 period

60. The transmission charges approved for the transmission asset from its COD to 31.3.2024 is as follows:

(₹ in lakh)

Particulars	**2022-23 (Pro-rata for 127 days)**	**2023-24**
Depreciation	84.48	286.51
Interest on Loan	81.23	260.07
Return on Equity	89.67	301.79

Particulars	2022-23 (Pro-rata for 127 days)	2023-24
Operation & Maintenance Expenses	26.46	78.70
Interest on Working Capital	4.35	16.12
Total	**286.20**	**943.19**

Filing Fee and Publication Expenses

61. 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 and RLDC Fees and Charges

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

Goods and Services Tax

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

64. MPPMCL has submitted the Petitioner's request as it is premature at this stage, and nothing can be allowed in anticipation.

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

Sharing of Transmission Charges

66. With effect from 1.11.2020, sharing of transmission charges is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the billing, collection, and disbursement of transmission charges shall be recovered as per the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

67. To summarise, AFC allowed for the transmission asset in this order are as follows:

(₹ in lakh)

Particulars	2022-23 (Pro-rata for 127 days)	2023-24
AFC	286.20	943.19

68. The Annexure to this order form part of the order.

69. This order disposes of Petition No. 325/TT/2023 in terms of the above findings and discussions.

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

Annexure

(₹ in lakh)

Capex	Admitted Capital Cost as on COD	Projected ACE		Admitted Capital Cost as on 31-03-2024	Dep Rate	Annual Depreciation	
		2022-23	2023-24			2022-23	2023-24
Building	0.00	0.00	15.00	15.00	3.34%	0.00	0.25
Transmission Line	974.47	325.79	302.82	1603.08	5.28%	60.05	76.65
Substation	3172.93	500.84	367.13	4040.90	5.28%	180.75	203.67
PLCC	0.00	0.00	0.00	0.00	6.33%	0.00	0.00
IT Equipment	0.80	25.00	27.63	53.43	15.00%	1.99	5.94
Total	**4148.20**	851.63	712.58	**5712.41**		**242.80**	**286.51**
					Avg. Gross Block	**4574.01**	**5356.12**
					WAROD	**5.31%**	**5.35%**