CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 6/TT/2023

Coram:

Shri Jishnu Barua, Chairperson Shri Arun Goyal, Member

Date of Order: 15.02.2024

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 Actual COD to 31.3.2024 for Asset-1: a) Shifting of 125 MVAR and 80 MVAR line reactors at Nellore (PG) from Nellore PS-Nellore (PG) 400 kV D/C Line to Nellore (PG)-Sriperumbudur 400 kV D/C Line (with suitable arrangement) and b) Bypassing Nellore PS-Nellore (PG) 400 kV D/C (Quad) line and Nellore (PG)-Thiruvalam 400 kV D/C Quad line at Nellore (PG) for making direct Nellore PS-Thiruvalam 400 kV D/C (Quad) Line under Transmission System for controlling High Loading of Nellore (PG)-Nellore PS 400 kV (Quad) D/C line in Southern Region.

And in the matter of:

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

... Petitioner

Vs.

- 1. Tamil Nadu Generation and Distribution Corporation Limited, NPKRR Maaligai, 800, Anna Salai, Chennai-600002.
- Transmission Corporation of Andhra Pradesh Limited (APTRANSCO), Vidyut Soudha, APTRANSCO, Near Axis Bank ATM, Eluru Road, Gunadala, Vijaywada-520004.
- Kerala State Electricity Board (KSEB), Vaidyuthi Bhavanam, Pattom, Thiruvananthapuram-695004.
- 4. Tamil Nadu Electricity Board (TNEB),



NPKRR Maaligai, 800, Anna Salai, Chennai-600002.

- 5. Electricity Department, Government of Goa, Vidyuti Bhawan, Panaji, Goa-403001.
- 6. Electricity Department, Government of Pondicherry, Pondicherry-605001,
- 7. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL), APEPDCL, P&T Colony, Seethmmadhara, VISHAKHAPATNAM, Andhra Pradesh.
- 8. Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL), Srinivasasa Kalyana Mandapam Backside, TiruchanoorRoad, Kesavayana Gunta, Tirupati-517501, Chittoor District, Andhra Pradesh.
- 9. Southern Power Distribution Company of Telangana Limited (TSSPDCL), 6-1-50, Corporate Office, Mint Compound, Hyderabad-500063, Telangana.
- Northern Power Distribution Company of Telangana Limited (TSNPDCL),
 H. No 2-5-3 1/2, Vidyut Bhawan, Corporate Office, Nakkal Gutta, Hanamkonda,
 Warangal-506001, Telangana.
- 11. Bangalore Electricity Supply Company Limited (BESCOM), Corporate Office, K. R. Circle Bangalore-560001, Karanataka.
- 12. Gulbarga Electricity Supply Company Limited (GESCOM), Station Main Road, Gulburga, Karnataka.
- 13. Hubli Electricity Supply Company Limited (HESCOM), Navanagar, PB Road, Hubli, Karnataka.
- MESCOM Corporate Office, Paradigm Plaza, AB Shetty Circle, Mangalore-575001, Karnataka.
- 15. Chamundeswari Electricity Supply Corporation Limited (CESC),
 927, L J Avenue, Ground Floor, New Kantharaj Urs Road,
 Saraswatipuram, Mysore-570 009, Karnataka.
 ... Respondent(s)



For Petitioner : Shri Zafrul Hasan, PGCIL

Shri Mohd. Mohsin, PGCIL

Shri Angaru Naresh Kumar, PGCIL

For Respondents: Shri Vallinayagam, Advocate, TANGEDCO

ORDER

Power Grid Corporation of India Limited has filed the instant petition for the determination

of transmission tariff for the period from COD to 31.3.2024 under the Central Electricity

Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred

to as "the 2019 Tariff Regulations") in respect of a) Shifting of 125 MVAR and 80 MVAR line

reactors at Nellore (PG) from Nellore PS-Nellore (PG) 400 kV D/C Line to Nellore (PG)-

Sriperumbudur 400 kV D/C Line (with suitable arrangement) and b) Bypassing Nellore PS-

Nellore (PG) 400 kV D/C (Quad) line and Nellore (PG)-Thiruvalam 400 kV D/C Quad line at

Nellore (PG) for making direct Nellore PS-Thiruvalam 400 kV D/C (Quad) Line (hereinafter

referred to as "the transmission project") in Southern Region.

Background

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

a. The Investment Approval of the transmission project was accorded by the

Competent Authority of POWERGRID, vide the Memorandum Ref.: C/CP/PA2021-03-

0C-IA003 dated 10.6.2020, at an estimated cost of ₹568 lakh including IDC of ₹11 lakh,

December 2019 price level.

b. The system for control of high short circuits at Nellore (PG) and high loading i.e.

opening of Nellore PS-Nellore (PG) interconnection was reviewed and discussed in the

42nd Standing Committee on Power System Planning in the Southern Region and 2nd

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SRSCT meeting held on 27.4.2018 and 10.6.2019, respectively. The scope of the scheme was discussed and agreed upon in the 2nd SRSCT meeting held on 10.6.2019.

- c. The transmission scheme was also discussed in the 36th SRPC meeting held on 12.7.2019 and recommended vide letter dated 14.8.2019. The Scheme was recommended for implementation through RTM by the Petitioner in the 4th National Committee on Transmission (NCT) held on 30.7.2019.
- d. The scope of work covered under the transmission project in the Southern Region is as follows:

Sub-station extension at Nellore (PG)

- a) Shifting of 125 MVAR and 80 MVAR line reactors at Nellore (PG) from Nellore PS-Nellore (PG) 400 kV D/C line to Nellore (PG)-Sriperumbudur 400 kV D/C line (with suitable arrangement).
- b) Bypassing Nellore PS-Nellore (PG) 400 kV D/C (Quad) line and Nellore (PG)-Thiruvalam 400 kV D/C (Quad) line at Nellore (PG) for making direct Nellore PS-Thiruvalam 400 kV D/C (Quad) line.
- e. Details of the transmission asset filed/ being filed under the transmission project are as follows:

a) Shifting of 125 MVAR and 80 MVAR line reactors at Nellore (PG) from Nellore PS-Nellore (PG) 400 kV D/C Line to Nellore (PG)-Sriperumbudur 400 kV D/C Line (with suitable arrangement) and b) Bypassing Nellore PS-Nellore (PG) 400 kV D/C (Quad) line and Nellore (PG)-Thiruvalam 400 kV D/C Quad line at Nellore (PG) for making direct	Asset	Scheduled COD as per IA	Actual COD
Nellore PS- Thiruvalam 400 kV D/C (Quad) Line	Nellore (PG) from Nellore PS-Nellore (PG) 400 kV D/C Line to Nellore (PG)-Sriperumbudur 400 kV D/C Line (with suitable arrangement) and b) Bypassing Nellore PS-Nellore (PG) 400 kV D/C (Quad) line and Nellore (PG)-Thiruvalam 400 kV D/C Quad line at Nellore (PG) for making direct		30.4.2021

- f. The entire scope of the project is completed and covered under the instant petition.
- 3. The present petition is for approval of transmission tariff based on actual expenditure incurred up to actual COD and additional capitalization projected to be incurred from COD to

31.3.2021 in respect of the transmission asset as per the details given below. The capital cost incurred up to COD and projected to be incurred during 2021-22 is duly certified in the Auditor Certificate.

(₹ in lakh)

Approved	Expenditure up to actual	Additional Capital Expenditure	Estimated	
cost	COD	2021-22	completion cost	
568.00	230.30	214.09	444.39	

- 4. The Respondents, mainly beneficiaries of the Southern 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. TANGEDCO, Respondent No. 1, has filed a reply, vide affidavit dated 5.4.2023 and has raised issues of time overrun, IDC, IEDC and additional capitalization. The issue raised by TANGEDCO and clarifications given by the Petitioner thereto have been dealt with in the relevant portions of this order.
- 6. The final hearing in this matter was held on 30.10.2023, and the order was reserved.
- 7. This order is issued considering the submissions made by the Petitioner in the main petition, TANGEDCO's reply, vide affidavit dated 5.4.2023, and the Petitioner's rejoinder, vide affidavit dated 25.9.2023.
- 8. Having heard the Petitioner and Respondent and perused the documents on record, we proceed to dispose of the petition.

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

9. The Petitioner has claimed the following transmission charges in respect of the transmission asset for the period from its COD to 31.3.2024:

(₹ in lakh)

Particulars	2021-22	2022-23	2023-24
	(pro-rata for 336 days)		
Depreciation	16.38	23.46	23.46
Interest on loan	12.47	16.84	15.44
Return on equity	17.48	25.04	25.04
Interest on Working Capital	0.61	0.86	0.84
O&M Expenses	-	-	ı
Total AFC	46.94	66.20	64.78

10. The Petitioner has claimed the following Interest on Working Capital (IWC) in respect of the transmission asset for the period from its COD to 31.3.2024:

(₹ in lakh)

Particulars	2021-22 (pro-rata for 336 days)	2022-23	2023-24
O&M Expenses	-	-	-
Maintenance Spares	-	-	-
Receivables	6.29	8.16	7.96
Total Working Capital	6.29	8.16	7.96
Rate of Interest (in %)	10.50	10.50	10.50
Interest on Working Capital	0.61	0.86	0.84

Date of Commercial Operation (COD)

- 11. The SCOD of the transmission asset was 10.1.2021 as per the Investment Approval, against which the Petitioner has claimed the COD of the transmission asset as 30.4.2021.
- 12. Regulation 5 of the 2019 Tariff Regulations provides as follows:
 - **"5. Date of Commercial Operation:** (1) The date of commercial operation of a generating station or unit thereof or a transmission system or element thereof and associated communication system shall be determined in accordance with the provisions of the Grid Code.
 - (2) In case the transmission system or element thereof executed by a transmission licensee is ready for commercial operation but the interconnected generating station or the transmission system of other transmission licensee as per the agreed project implementation schedule is not ready for commercial operation, the transmission licensee may file petition before the Commission for approval of the date of commercial operation of such transmission system or element thereof:

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

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

- (a) Energisation certificate issued by the Regional Electrical Inspector under Central Electricity Authority;
- (b) Trial operation certificate issued by the concerned RLDC for charging element with or without electrical load;
- (c) Implementation Agreement, if any, executed by the parties;
- (d) Minutes of the coordination meetings or related correspondences regarding the monitoring of the progress of the generating station and transmission systems;
- (e) Notice issued by the transmission licensee as per the first proviso under this clause and the response;
- (f) Certificate of the CEO or MD of the company regarding the completion of the transmission system including associated communication system in all respects.
- (3) The date of commercial operation in case of integrated mine(s), shall mean the earliest of
 - (a) the first date of the year succeeding the year in which 25% of the Peak Rated Capacity as per the Mining Plan is achieved; or
 - (b) the first date of the year succeeding the year in which the value of production estimated in accordance with Regulation 7A of these regulations, exceeds total expenditure in that year; or
 - (c) the date of two years from the date of commencement of production:

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

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

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



13. In support of the actual COD of the transmission assets, the Petitioner has submitted a copy of the CEA Energisation certificate dated 14.7.2021, RLDC Charging Certificate dated 26.5.2021 certifying that successful trial operation was completed on 3.4.2021, CMD Certificate as required under Grid Code and self-declaration COD letter. Taking into consideration of CEA Energisation certificate, RLDC charging certificate and CMD certificate, the COD of the transmission asset is approved as 30.4.2021.

Capital Cost

- 14. Regulation 19 of the 2019 Tariff Regulations provides as follows:
 - "19 Capital Cost: (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.
 - (2) The Capital Cost of a new project shall include the following:
 - (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
 - (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
 - (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
 - (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
 - (e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;
 - (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
 - (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
 - (h) Adjustment of revenue earned by the transmission licensee by using the Asset-before the date of commercial operation;
 - (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway.
 - (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing:
 - (I) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;

- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
- (n) Expenditure on account of change in law and force majeure events; and
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (3) The Capital cost of an existing project shall include the following:
 - (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
 - (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
 - (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
 - (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (4) The capital cost in case of existing or new hydro generating station shall also include:
 - (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
 - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (5) The following shall be excluded from the capital cost of the existing and new projects:
 - (a) The Asset-forming part of the project, but not in use, as declared in the tariff petition;
 - (b) De-capitalised Asset-after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

Provided that in case replacement of transmission Asset-is recommended by Regional Power Committee, such Asset-shall be decapitalised only after its redeployment; Provided further that unless shifting of an Asset-from one project to another is of permanent nature, there shall be no de-capitalization of the concerned asset.

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



15. The Petitioner has submitted the Auditor's Certificate and has claimed the following capital cost incurred as on COD and Additional Capital Expenditure (ACE) projected to be incurred in 2021-22, in respect of the transmission asset:

(₹ in lakh)

Approved cost	Expenditure Up to COD	Additional Capital Expenditure 2021-22	Estimated completion cost
568.00	230.30	214.09	444.39

16. The Petitioner has submitted that the estimated completion cost is within the FR-approved cost. The Petitioner has submitted the following reasons for variation in the cost of the transmission asset:

i. Variation in IDC Cost:

The decrease in IDC is attributable to variation in the rate of interest considered in FR v/s actuals. In FR, IDC was calculated considering the rate of interest for domestic loans @10.5%; however, in actuality, the weighted average rate of interest on loans is around 5.95%. The actual IDC accrued up to DOCO has been considered while claiming the tariff.

ii. Variation in IEDC Cost:

While estimating for the Investment Approval, 3% and 10.75% of equipment cost have been considered as contingency and IEDC, respectively. The actual amount of IEDC has been taken while claiming the cost.

iii. Variation in Equipment Cost

Being a Government enterprise, the Petitioner has the obligation for the development of indigenous manufacturers of equipment as well as to adhere to the Government of India guidelines in vogue. Accordingly, the Petitioner has been following a well laid down procurement policy, which ensures both transparency and competitiveness in

the bidding process. The Route of Domestic Competitive Bidding (DCB) process has

been followed to award this project. Through this process, the lowest possible market

prices for required product/services/as per detailed design is obtained and contracts

are awarded on the basis of the lowest evaluated eligible bidder. The best competitive

bid prices against tenders may vary as compared to the cost estimate depending

upon prevailing market conditions, design and site requirements. Whereas the

estimates are prepared by the Petitioner as per well-defined procedures for cost

estimate. The FR cost estimate is a broad indicative cost worked out generally on the

basis of average unit rates of recently awarded contracts/general practice. The cost

estimate of the project is on the basis of the December 2019 price level.

17. We have considered the submissions of the Petitioner. The estimated completion cost of

the transmission asset is within the FR cost, and therefore, there is no cost overrun in the case

of the transmission asset. Taking into consideration the reasons given by the Petitioner for the

cost variation, we approve the variation in the cost of the transmission asset.

Time Over-run

The Petitioner has submitted that as per the Investment Approval dated 10.6.2021, the 18.

SCOD of the transmission asset was 10.1.2021, against which the transmission asset was put

under commercial operation on 30.4.2021 with a time overrun of 110 days. The Petitioner has

submitted that the time overrun of 110 days is due to the worldwide COVID-19 pandemic. The

Petitioner has made the following submissions in this regard:

a) The Petitioner's projects were affected by the COVID-19 pandemic and the consequent

nationwide lockdown, which was in phases as follows:

Phase 1: 25.3.2020 to 14.4.2020 (21 days)

Phase 2: 15.4.2020 to 3.5.2020 (19 days)

Phase 3: 4.5.2020 to 17.5.2020 (14 days)

Phase 4: 18.5.2020 to 31.5.2020 (14 days)

Unlock:

Unlock 1.0: 1.6.2020 to 30.6.2020 (30 days)

• Unlock 2.0: 1.7.2020 to 31.7.2020 (31 days)

Unlock 3.0: 1.8.2020 to 31.8.2020 (31 days)

Unlock 4.0: 1.9.2020 to 30.9.2020 (30 days)

b) COVID-19 restricted people, and this restricted movement affected the critical supply

chain, transportation, worker/labour absenteeism due to illness/quarantine/ migration,

etc., which resulted in the complete halting of ongoing projects. The lockdown imposition

led to the voluntary stepback of construction workers, which was unforeseen and

unavoidable. The sites were either closed or access was largely restricted as a result of

measures to contain the COVID-19 outbreak. The contractors were not able to carry out

the work as a result of actions by governments to prevent the spread of the outbreak.

c) The supplier-delivery issues, worker absenteeism due to illness, delayed issuance of

permits, travel restrictions, and loss of time or inefficiencies due to the need to practice

social distancing on the job site had scheduled consequences.

d) Lack of engineering and technical support and supply chain disruptions were the major

factors impacting project schedules and implementations. Thus, the commissioning

of various projects, including the subject project, faced delays due to the squeezing of

supply lines and construction activities.

e) When construction resumed, additional delays and inefficiencies further pushed back

completion dates. The construction could not be started immediately. The supply chains

were not fully restored. If anybody got infected on the construction site after, the area was

sealed, and all related people were quarantined for 14 to 28 days. The construction pace

came to a grinding halt. Further, administrative action / FIR was lodged against the subcontractors, which added to the lethargic pace of progress. With the halting of various line construction activities, the work was at a standstill position for almost four to five months and gradually gathered speed in line with Government directives.

- 19. Therefore, the Petitioner has requested to consider the above-mentioned *force majeure* issues, which were beyond the control of the Petitioner and condone the time overrun in the completion of the transmission asset under Regulation 22(2)(c) of the 2019 Tariff Regulations and approve the tariff as claimed.
- 20. Regulation 22(2) (c) of the 2019 Tariff Regulations provides as follows:
 - "(2) The "uncontrollable factors" shall include but shall not be limited to the following:
 - a. Force Majeure events;
 - b. Change in law; and
 - c. Land acquisition except where the delay is attributable to the generating company or the transmission licensee."
- 21. TANGEDCO has submitted that the cause of the time over-run is not covered under the uncontrollable factors. TANGEDCO has submitted that due to the COVID-19 pandemic, the Ministry of Power (MoP) Government of India, vide letter dated 12.6.2021, had provided a three month extension for ISTS projects where the SCOD is after 1.4.2021. As the SCOD of the transmission asset is before 1.4.2021, this transmission project is not eligible for availing the extension of SCOD, and the time overrun may not be condoned.
- 22. In response, the Petitioner has made the following submissions:
 - a) The IA was approved on 11.6.2020 during the rise of the COVID-19 pandemic; the completion schedule in the IA has been considered as seven months optimistically despite prevailing COVID-19 pandemic situations because of the requirement of transmission assets to mitigate the operational constraints. It was difficult at the IA stage, i.e. in June 2020, to ascertain the exact impact of the COVID-19 pandemic and to fix the

completion schedules. Hence, the Petitioner made a positive effort to keep the completion schedule to the minimum extent possible of seven months because of the requirement of transmission assets to mitigate the operational constraints.

- b) The contract for the said project was immediately awarded on 30.6.2020 during the rise of the COVID-19 pandemic. The onset of the pandemic and its continuation impacted the project execution due to a shortage of labour, unplanned lockdowns restrictions in movement, etc. Several employees of the Petitioner were affected, along with employees of the Agency and sub-contractors of the project. Mobilization of resources and manpower became extremely difficult owing to different lockdown situations in different states. This has not only led to intermittent delays but also affected the overall project planning and schedules. Further, the restricted guidelines of maintaining personal distance impacted the overall production capacity/ efficiency of all suppliers.
- c) Despite continuous efforts made by the Petitioner, the transmission asset has been put under commercial operation with a time overrun of about three months and 19 days. In addition to delays due to COVID-19, hindrances due to heavy rains and severe cyclone-NIVAR also impacted the progress at the site.
- d) The time schedule for the competition of the project is only seven months. Out of this short duration, rains during November, December 2020 and January 2021, due to retreating monsoon and a severe cyclone- NIVAR, have caused stagnation of water in and around the switch yard, which resulted in bulging of soil and non-movement of machineries for excavation of equipment foundations. Due to the nature of the soil available at the Nellore Sub-station, it took considerable time for the stagnated water to

evaporate/ get absorbed. As per the average rainfall data at Nellore, submitted by the Petitioner, October to December 2020 registered higher than average rainfall.

- 23. We have considered the submissions of the Petitioner and TANGEDCO. The Petitioner has prayed for condonation of time overrun as the execution of the transmission assets was affected by COVID-19 and heavy rains. As regards Covid-19, TANGEDCO has contended that the extension granted by the MoP due to Covid-19 is not applicable in the present case as the SCOD of the transmission asset was before 1.4.2021 and, therefore, the time overrun may not be condoned. It is observed that the MoP, taking into consideration the Covid-19 pandemic and the consequent lockdown, extended the SCOD of the transmission projects by five months and three months in two stints, i.e. vide letter dated 27.7.2020 had extended the SCOD of projects that were under construction as on 25.3.2020 by five months and vide letter dated 12.6.2021 extended the SCOD of the projects by three months whose SCOD was after 1.4.2021. The Investment Approval and SCOD of the transmission asset were 10.6.2020 and 10.1.2021, respectively. Thus, the transmission asset was not under construction as on 25.3.2020, and its SCOD was not after 1.4.2021. Therefore, the MoP's orders dated 27.2.2020 and 12.6.2021 and the relief granted by the said orders are not applicable to the transmission asset, as contended by TANGEDCO.
- 24. The Petitioner has contended that the execution of the transmission asset was affected by the Covid-19 pandemic and the subsequent lockdown in four phases from 25.3.2020 to 31.5.2020. It is observed from the submissions of the Petitioner that the Investment Approval for the transmission asset was granted on 10.6.2020, and the date of award of the contract was 30.6.2020, which is after the end of the fourth phase of lockdown on 31.5.2020. Therefore, we are of the view that the Petitioner's contention that the execution of the transmission asset was

affected by the Covid-19 pandemic and the subsequent lockdown does not have any merit. It is further observed from Form 5A, submitted by the Petitioner that the start date of work was 30.6.2020, and the date of completion of work was 30.4.2021, which is more than three months from the scheduled COD. Further, the contract was for more than 10 months when the timeline for execution of the transmission asset was 7 months. It is not clear from the submissions of the Petitioner as to how the Petitioner could have put the transmission asset into commercial operation on 10.1.2021 when the date of completion of the work as per the contract/ award was 30.4.2021. Perusal of the documents and the submissions made by the Petitioner shows that there is a lack of proper planning on the part of the Petitioner, which is attributable to the Petitioner.

25. The Petitioner has submitted that the transmission asset was affected due to rainfall and floods during the monsoon in November, December of 2020 and January, 2021. The Petitioner has submitted paper clippings to show that there was heavy rainfall. It is observed from the trend of average rainfall over the past few years that the rainfall received in Andhra Pradesh in November, December of 2020 and January 2021 was not abnormally high. The Petitioner should have planned better to address issues arising because of rains. In our view, delay on this count was not beyond the control of the Petitioner. Hence, the time over-run due to alleged heavy rainfall cannot be condoned. Accordingly, the time over-run of 110 ten days in case of the transmission asset is accordingly not condoned.

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

26. The Petitioner has claimed ₹0.71 lakh and ₹62.61 lakh as actual IDC and IEDC, respectively, which are within the approved apportioned cost as per F.R. as per the Investment

Approval. TANGEDCO has submitted that the IDC and IEDC for the period of time overrun can be allowed only if it is due to uncontrollable factors. The time over-run in the instant case is attributable to the Petitioner. Hence, the IDC and IEDC, in respect of the transmission asset, may be disallowed for the period of time overrun.

27. We have considered the submissions for the Petitioner and TANGEDCO. It is observed that the Petitioner has claimed only the loan from HDFC, which was drawn on 30.4.2021, and it is after SCOD (i.e. 10.1.2021). Since the time overrun of 110 days has been disallowed, the IDC claim amounting to ₹0.71 lakh is disallowed. Further, the Petitioner has claimed an IEDC of ₹62.61 lakh and has submitted an Auditor's Certificate in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the transmission asset. Hence, the allowable IEDC has been worked out on the pro-rata basis of the total number of allowable days and the total number of days taken for execution of the 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	claimed	IEDC disallowed due to time over-run not condoned	IEDC allowed
0.71	0.71	0.00	62.61	21.26	41.35

28. The Petitioner has not claimed any Initial Spares for the transmission asset. Accordingly, the capital cost allowed in respect of the transmission asset as on COD is as follows:

(₹ in lakh)

Capital cost	Less: IDC	Less: IEDC disallowed due to time over-run	Capital cost
claimed as on	disallowed due to		allowed as on
COD	time over-run		COD
230.30	0.71	21.26	208.33

Additional Capital Expenditure

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



"24. Additional Capitalization

- (1) The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
 - a. Un discharged liabilities recognized to be payable at a future date;
 - b. Works deferred for execution;
 - c. Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations:
 - d. Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law; and
 - e. Change in law or compliance of any existing law: and
 - f. Force Majeure events:

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

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

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

- (1) The ACE incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cutoff date may be admitted by the Commission, subject to prudence check:
 - a. Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
 - b. Change in law or compliance of any existing law;
 - c. Deferred works relating to ash pond or ash handling system in the original scope of work;
 - d. Liability for works executed prior to the cut-off date;
 - e. Force Majeure events;
 - f. Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and g) Raising of ash dyke as a part of ash disposal system.
- (2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:
 - a. The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations.
 - b. The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;



- c. The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
- d. The replacement of such asset or equipment has otherwise been allowed by the Commission."
- 30. The Petitioner has submitted that the Additional Capital Expenditure incurred after COD may be allowed under Regulation 24 of the 2019 Tariff Regulations. TANGEDCO, in its reply, has submitted that the Petitioner may be directed to submit the reason for the retention of payment beyond the period mentioned in the contractual agreements and also furnish the details of the actual discharge of the liabilities. In response, the Petitioner has submitted that the Additional Capitalization incurred/projected to be incurred mainly on account of Balance/Retention Payments and unexecuted works within the cut-off date. Hence, the same may be allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. The details of underlying reasons for additional capitalization are given in Form-7. The Petitioner has further submitted the Package-wise and vendor-wise details of the Additional Capital Expenditure (ACE) claimed in the 2019-24 period, and the same is as follows:

(₹ in lakh)

		(\ III Idilli)	
Name of the Vendor	2021-22		
	Additional liability recognized	Un discharged liability	
GE T&D India Limited	168.78	45.31	

31. We have considered the submissions of the Petitioner and TANGEDCO. THE ACE claimed is on account of balance and retention payments and is allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. The summary of the ACE allowed for the 2019-24 tariff period is as follows:

(₹ in lakh)

	ACE allowed				
Particulars	2021-22 2022-23 2023-24				
ACE	214.09	0.00	0.00		

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

 (₹ in lakh)

 Capital cost allowed as on COD
 Allowed ACE
 Total

 2021-22
 2022-23
 2023-24

 208.33
 214.09
 0.00
 0.00
 422.42

Debt Equity Ratio

- 33. 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

- (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."



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

Particulars	Cost as on COD (₹ in lakh)	(in %)	Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	145.83	70.00	295.70	70.00
Equity	62.50	30.00	126.73	30.00
Total	208.33	100.00	422.42	100.00

Depreciation

- 35. 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."
- 36. 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 an Annexure 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 in respect of the transmission asset for the 2019-24 tariff period is as follows:

(₹ in lakh)

	Particulars Particulars	2021-22	2022-23	2023-24
		(Pro rata for		
		336 days)		
Α	Opening Gross Block	208.33	422.42	422.42
В	Addition during the year 2019-24 due to projected ACE	214.09	0.00	0.00
С	Closing Gross Block (A+B)	422.42	422.42	422.42
D	Average Gross Block (A+C)/2	315.38	422.42	422.42
Е	Average Gross Block (90% depreciable assets)	315.38	422.42	422.42
F	Average Gross Block (100% depreciable assets)	0.00	0.00	0.00
	Depreciable value (excluding IT equipment and	283.84	380.18	380.18
G	software) (E*90%)			
	Depreciable value of IT equipment and software	0.00	0.00	0.00
Н	(F*100%)			
I	Total Depreciable Value (G+H)	283.84	380.18	380.18
	Weighted average rate of Depreciation (WAROD) (in	5.28	5.28	5.28
J	%)			
K	Lapsed useful life at the beginning of the year (Year)	0	0	1
L	Balance useful life at the beginning of the year (Year)	25	25	24
M	Depreciation during the year (D*J)	15.33	22.30	22.30
N	Cumulative Depreciation at the end of the year	15.33	37.63	59.94
	Remaining Aggregate Depreciable Value at the end of	268.51	342.55	320.24
0	the year			

Interest on Loan (IoL)

- 37. 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 decapitalisation 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".
- 38. The weighted average rate of interest of IoL has been considered as claimed by the Petitioner. The Petitioner has prayed that the change in interest rate due to the floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up.
- 39. loL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. loL allowed for the transmission asset is as follows:

(₹ in lakh)

	Particulars	2021-22	2022-23	2023-24
		(Pro rata for		
		336 days)		
Α	Gross Normative Loan	145.83	295.70	295.70
В	Cumulative Repayments up to Previous Year	0.00	15.33	37.63
С	Net Loan-Opening (A-B)	145.83	280.37	258.06
D	Addition due to ACE	149.86	0.00	0.00
Е	Repayment during the year	15.33	22.30	22.30
F	Net Loan-Closing (C+D-E)	280.37	258.06	235.76
G	Average Loan (C+F)/2	213.10	269.22	246.91
Н	Weighted Average Rate of Interest on Loan (in %)	5.95	5.95	5.95
I	Interest on Loan (G*H)	11.67	16.02	14.69

Return on Equity (RoE)

- 40. 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-rate 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."
- 41. 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 the actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed with respect to the transmission assets is as follows:

(₹ in lakh) **Particulars** 2021-22 2022-23 2023-24 (pro-rata for 336 days) 126.73 126.73 Opening Equity 62.50 Addition due to ACE 0.00 64.23 0.00 С Closing Equity (A+B) 126.73 126.73 126.73 Average Equity (A+C)/2 126.73 126.73 94.61 Return on Equity (Base Rate) (in %) 15.50 15.50 15.50 Tax Rate applicable (in %) 17.472 17.472 17.472 Rate of Return on Equity (Pre-tax) (in %) G 18.782 18.782 18.782 Return on Equity (Pre-tax) (D*G) 16.36 23.80 23.80

Operation & Maintenance Expenses (O&M Expenses)

42. The Petitioner has not claimed any O&M Expenses for the transmission asset.

Interest on Working Capital (IWC)

- 43. 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;"
- 44. The Petitioner has considered the rate of IWC as 10.50% as on 1.4.2019.
- 45. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) considered is 10.50% (SBI 1-year MCLR applicable as on COD of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon for the transmission are as follows:

(₹ in lakh)

Particulars	2021-22	2022-23	2023-24
	(pro-rata for		
	336 days)		
Working Capital for O&M Expenses (O&M	0.00	0.00	0.00
Expenses for one month)			
Working Capital for Maintenance Spares	0.00	0.00	0.00
(15% of O&M Expenses)			
Working Capital for Receivables	5.42	7.76	7.57
(Equivalent to 45 days of annual fixed cost			
/annual transmission charges)			
Total Working Capital	5.42	7.76	7.57
Rate of Interest for working capital (in %)	10.50	10.50	10.50
Interest on working capital	0.57	0.81	0.80

Annual Fixed Charges for 2019-24 Tariff Period

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

			(₹ in lakh)
Particulars	2021-22 (pro-rata for 336 days)	2022-23	2023-24
Depreciation	15.33	22.30	22.30
Interest on Loan	11.67	16.02	14.69
Return on Equity	16.36	23.80	23.80
O&M Expenses	0.00	0.00	0.00
Interest on Working Capital	0.57	0.81	0.80
Total	43.93	62.93	61.59

Filing Fee and Publication Expenses

47. 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

48. 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 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

49. 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.

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

Security Expenses

- 51. The Petitioner has submitted that security expenses in respect of transmission assets are not claimed in the instant Petition, and it would file a separate petition for claiming the overall security expenses and consequential IWC.
- 52. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on a projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been disposed of by the Commission, vide order dated 3.8.2021. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

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

54. The COD of the asset is approved as 30.4.2021. Accordingly, the billing, collection, and disbursement of transmission charges shall be recovered in terms of Regulation 57 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and shall

be shared by the beneficiaries and long-term transmission customers in Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from to time.

55. To summarise, AFC allowed in respect of the transmission asset for 2019-24 tariff period in this order are as follows:

			(₹ in lakh)
Particulars	2021-22	2022-23	2023-24
	(pro-rata for 336 days)		
AFC	43.93	62.93	61.59

- 56. The Annexure to this order forms part of the order.
- 57. This order disposes of Petition No. 6/TT/2023 in terms of the above findings and discussions.

sd/(Arun Goyal) (Jishnu Barua)
Member Chairperson

Annexure

(₹ in lakh)

	Admitted	Projected ACE				Annual Depreciation			
Capex	Capital Cost as on COD	2021-22	2022-23	2023-24	Admitted Capital Cost as on 31-03-2024	Dep Rate	2021-22	2022-23	2023-24
Building	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00
Substation	208.33	214.09	0.00	0.00	422.42	5.28%	16.65	22.30	22.30
PLCC	0.00	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00
IT Equipment	0.00	0.00	0.00	0.00	0.00	15.00%	0.00	0.00	0.00
Total	208.33	214.09	0.00	0.00	422.42		16.65	22.30	22.30
						Avg. Gross Block	315.38	422.42	422.424
						WAROD	5.28%	5.28%	5.28%