

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 32/TT/2023**

**Coram:**

**Shri Jishnu Barua, Chairperson  
Shri Arun Goyal, Member**

**Date of Order: 30.03.2024**

**In the matter of:**

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for determination of transmission tariff from COD to 31.3.2024 for "2 number of 220 kV Line Bays at Samba Sub-station" covered under "Northern Region System Strengthening-XLII" in Northern Region.

**And in the matter of:**

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

**... Petitioner**

**Vs.**

1. Ajmer Vidyut Vitran Nigam Limited,  
Corporate Office, Vidyut Bhawan,  
Panchsheel Nagar, Makarwali Road,  
Ajmer-305004.
2. Jaipur Vidyut Vitran Nigam Limited,  
Vidyut Bhawan,  
Janpath, Jyoti Nagar,  
Jaipur-302005.
3. Jodhpur Vidyut Vitran Nigam Limited,  
New Power House, Industrial Area,  
Jodhpur-342003.
4. Himachal Pradesh State Electricity Board Limited,  
Vidyut Bhawan, Kumar House Complex Building II,  
Shimla-171004.



5. Punjab State Power Corporation Limited,  
The Mall, PSEB Head Office,  
Patiala-147001 (Punjab).
6. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector-6,  
Panchkula- 134109 (Haryana).
7. Power Development Department,  
Government of Jammu & Kashmir,  
Mini Secretariat,  
Jammu.
8. Uttar Pradesh Power Corporation Limited,  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow-226001 (Uttar Pradesh).
9. BSES Yamuna Power Limited,  
B-Block, Shakti Kiran, Building (Near Karkadooma Court),  
Karkadooma, 2nd Floor,  
New Delhi-110092.
10. BSES Rajdhani Power Limited,  
BSES Bhawan, Nehru Place,  
New Delhi-110019.
11. Tata Power Delhi Distribution Limited,  
NDPL house, Hudson Lines Kingsway Camp,  
Delhi-110009.
12. Chandigarh Administration,  
Sector-9,  
Chandigarh.
13. Uttarakhand Power Corporation Limited,  
Urja Bhawan, Kanwali Road,  
Dehradun (Uttarakhand).
14. North Central Railway,  
DRM Office, Nawab Yusuf Road Prayagraj,  
Uttar Pradesh-211011.
15. New Delhi Municipal Council,  
Palika Kendra, Sansad Marg,  
New Delhi-110002 .



16. Jammu & Kashmir Power Transmission Corporation Limited,  
PDD Building, Exhibition Grounds, Jahangir Chowk,  
Srinagar,  
Jammu & Kashmir-190009.

... Respondent(s)

**For Petitioner** : Shri Bipin Bihari Rath, PGCIL  
Shri Vivek Singh, PGCIL  
Ms. Supriya Singh, PGCIL  
Shri Amit Yadav, PGCIL  
Ms. Ashita Chauhan, PGCIL

**For Respondents** : None

### **ORDER**

Power Grid Corporation of India Limited has filed the instant petition for the determination of transmission tariff for the period from the date of commercial operation (COD) to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of 2 number of 220 kV Line Bays at Samba Sub-station (hereinafter referred to as 'the transmission asset') covered under "Northern Region System Strengthening-XLII" in Northern Region (hereinafter referred to as 'the transmission project').

### **Background**

2. The brief facts of the case are as follows:
  - a. The scope of the scheme was discussed and agreed upon in the 1<sup>st</sup> meeting of the Northern Region Standing Committee on Transmission held on 11.9.2018, 2<sup>nd</sup> meeting of the National Committee on Transmission held on 4.12.2018, 3<sup>rd</sup> meeting of the Empowered Committee on Transmission held on 21.12.2018 and 43<sup>rd</sup> NRPC/40<sup>th</sup> TCC meeting held on 30.10.2018 and 29.10.2018, respectively.



b. The Investment Approval (IA) of the transmission project was accorded by the Petitioner's Competent Authority on 25.7.2019 vide Memorandum Ref.: C/CP/PA1920-04-0G-IA004, at an estimated cost of ₹804 lakh, including an Interest During Construction (IDC) of ₹29 lakh based on March, 2019 price level.

c. The scope of work covered under the transmission project is as follows:

**Sub-stations:**

400/220 kV Samba (Jatwal) Sub-station (Extension)

220 kV line bay: two (for termination of 220 kV Double Circuit ("D/C") Samba (PDD)-Samba (Jatwal) transmission line of Jammu and Kashmir PDD

d. The transmission asset is the only asset covered in the transmission project.

e. The Petitioner has submitted that the transmission asset was charged on a 'no load' basis on 17.5.2021 due to the non-availability of the associated downstream network, i.e. 220 kV D/C Samba (PDD)-Samba (Jatwal) transmission line of Jammu and Kashmir PDD. The Petitioner furnished the RLDC certificate for 'no load charging' on 17.5.2021. The Petitioner has given notice regarding the charging of the transmission asset to the Jammu & Kashmir Power Transmission Corporation Limited (JKPTCL). Therefore, the transmission asset qualifies for approval of COD as per Regulation 5(2) of the 2019 Tariff Regulations. A copy of CEA/RLDC/CMD Certificates of the transmission asset and intimation/ notice served upon JKPTCL have been submitted by the Petitioner.

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

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

*2) Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para –8.3 above.*

*3) 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.*

*4) 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.*

*5) 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.*

*6) 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.*

*7) Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses separately as mentioned at para 8.8 above.*

*8) Allow the initial spare as procured in the current petition in full as claimed in the instant petition under Regulation 54 of the CERC (Terms and Condition of Tariff) Regulation,2014, "Power to Relax" and Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*

*9) 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.*

*10) 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.*

*11) Approve DOCO of Asset-1 as 19.05.2021 under the proviso 5 (2) of CERC (Terms and conditions of Tariff) Regulation, 2019.*

*12) Condone the Time overrun of all the assets as per clause 22 (2) of Tariff Regulation' 2019.*

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

4. The present petition covers approval of tariff based on the actual expenditure incurred up to COD and additional capitalization projected to be incurred from COD to 31.3.2024 in respect of the transmission asset. The capital cost incurred up to COD duly certified by the



Auditor's Certificate and additional expenditures projected to be incurred during 2021-22 and 2022-23 with respect to the transmission asset are as follows:

Approved cost	Expenditure up to COD	Additional Capital Expenditure (ACE)			Estimated completion cost
		2021-22	2022-23	2023-24	
804.00	463.30	200.66	130.31	0.00	794.27

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

6. The Petitioner has served the petition on the Respondents and notice regarding filing of the instant petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. JKPTCL, Respondent No. 16, has filed its reply vide letter dated 18.10.2023 and has submitted that the associated transmission network has been put under commercial operation on 26.7.2021. The submissions made by JKPTCL and clarifications thereto given by the Petitioner have been dealt with in the relevant portions of this order.

7. The final hearing in this matter was held on 30.10.2023, and the order was reserved.

8. This order is issued considering the submissions made by the Petitioner vide affidavit dated 11.8.2022 in the main petition, JKPTCL's letter dated 18.10.2023, and the Petitioner's rejoinder filed vide affidavit dated 21.11.2023.

9. Having heard the Representatives for the Petitioner and perused the material on record, we proceed to dispose of the petition.



### **Determination of Annual Fixed Charges for FY 2019-24 Tariff Period**

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

(₹ in lakh)				
Sl. No.	Particulars	2021-22 (pro-rata for 317 days)	2022-23	2023-24
1	Depreciation	30.97	44.94	48.88
2	Interest on Loan	19.63	27.33	27.25
3	Return on Equity	27.56	41.08	44.75
4	Interest on Working Capital	2.61	3.38	3.54
5	O&M Expenses	41.90	49.92	51.68
	<b>Total Annual Fixed Charges</b>	<b>122.67</b>	<b>166.65</b>	<b>176.10</b>

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

(₹ in lakh)			
Particulars	2021-22 (pro-rata for 317 days)	2022-23	2023-24
O&M Expenses-one month	4.02	4.16	4.31
Maintenance Spares 15% of O&M Expenses	7.24	7.49	7.75
Receivables equivalent to 45 days of AFC	17.41	20.55	21.65
Total Working Capital	28.67	32.20	33.71
Bank rate as on 1.4.2019 or as on 1 <sup>st</sup> April of the COD year, whichever is later (in %)	10.50	10.50	10.50
<b>Interest on Working Capital</b>	<b>3.01</b>	<b>3.38</b>	<b>3.54</b>
<b>Pro-rata Interest on Working Capital</b>	<b>2.61</b>	<b>3.38</b>	<b>3.54</b>

### **Date of Commercial Operation (COD)**

12. The Petitioner has claimed COD of the transmission asset as 19.5.2021 under Regulation 5(2) of the 2019 Tariff Regulations as the associated downstream system being executed by JKPTCL is not ready. The Petitioner has further submitted that the transmission asset was charged under a 'no load' basis on 17.5.2021, and COD has been claimed as 19.5.2021 under Regulation 5(2) of the 2019 Tariff Regulations.

13. 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.”





14. In support of COD claim of the transmission asset, the Petitioner has furnished a copy of the provisional Central Electricity Authority (CEA) energization certificate, RLDC charging certificate, CMD certificate and self-declaration letter regarding COD

15. The Commission vide Record of Proceedings (RoP) for hearing dated 27.9.2023 observed as follows:

*“3. The Commission observed that it would like to hear JKPTCL on the Petitioner’s request for approval of the COD of the transmission asset under Regulation 5(2) of the 2019 Tariff Regulations on the plea that the associated transmission system under the scope of JKPTCL was not ready. Accordingly, the Commission directed JKPTCL to be present on the next date of the hearing and also to file its reply.”*

16. As per the directions of the Commission in RoP dated 27.9.2023, JKPTCL submitted that the construction of associated transmission system i.e. two 220 kV line bays at 400/220 kV Samba (PG) Sub-station, were constructed by the Petitioner for feeding 220/66 kV Samba (JKPTCL) Sub-station. The work of the associated transmission system i.e. two transmission lines from 400/220 kV Samba (PG)-220/66 kV Samba (JKPTCL) Sub-station and the 220/66 kV Samba (JKPTCL) Sub-station was also tendered/awarded by the Petitioner. The 220/66 kV Grid Station IGC, Samba, was charged on 14.7.2021 and put on load on 26.7.2021. The delay in charging was due to the lockdown during Covid-19 and severe RoW issues.

17. In response, the Petitioner has submitted that 400/220 kV Samba (PG)-220/66 kV Samba (JKPTCL) along with 220/66 kV Samba (JKPTCL) Sub-station are owned by JKPTCL. The Petitioner was entrusted to implement the 400/220 kV Samba (PG)-220/66 kV Samba (JKPTCL) along with 220/66 kV Samba (JKPTCL) Sub-station of JKPTCL on a consultancy basis. The said line was charged on 14.7.2021 and was put on load with effect from 27.7.2021. The Petitioner has submitted that the delay in execution of the said transmission line is not attributable to the Petitioner.



18. We have considered the submissions of the Petitioner and JKPTCL. The Petitioner has sought a declaration of COD for the transmission asset as 19.5.2021 under Regulation 5(2) of the 2019 Tariff Regulations. In support of COD of the transmission asset, the Petitioner has submitted the provisional CEA Energization Certificate dated 12.5.2021 under Regulation 43 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, RLDC Charging Certificate on 'no load' basis, self-declaration of COD letter dated 12.4.2019, and CMD certificate as required under the Grid Code. Taking into consideration the CEA Energization Certificate, RLDC Charging Certificate on the 'no load' basis, and the CMD's Certificate, the COD of the transmission asset is approved as 19.5.2021 under Regulation 5(2) of the 2019 Tariff Regulations.

19. The provisional energization certificate dated 12.5.2021 shows that the energization certificate is accorded up to 12.8.2021, subject to consistent compliance with the relevant provisions of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010. The Petitioner is, accordingly, directed to submit the final CEA energization certificate at the time of truing-up.

### **Capital Cost**

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

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

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

*(a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*

*(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*

*(c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*

*(d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*



- (e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
- (h) Adjustment of revenue earned by the transmission licensee by using the 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.”*

21. The Petitioner has submitted the Auditor’s Certificate and has claimed the following capital cost incurred as on COD and has projected Additional Capital Expenditure (ACE) to be incurred in respect of the transmission asset and the same is as follows:

Approved cost	Expenditure up to actual COD	Additional Capital Expenditure (ACE)			Estimated completion cost
		2021-22	2022-23	2023-24	
804.00	463.30	200.66	130.31	0.00	794.27

22. The Petitioner has submitted that the estimated completion cost of the transmission asset is within the FR cost, and there is no cost over-run. With regard to item-wise cost variation between apportioned approved cost and estimated completion cost, the Petitioner has submitted that it, being a Government enterprise, has been following a well laid down procurement policy, which ensures both transparency and competitiveness in the bidding process. The Petitioner further submitted that through this process, the lowest possible market prices for the required products/services as per detailed designing are obtained, and contracts are awarded on the basis of the lowest evaluated eligible bidder. Further, the best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market forces, design and site requirements; in comparison, the estimates are prepared by the Petitioner as per well-defined procedures. 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 Petitioner has also submitted that 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 after evaluating bids on overall basis only. Hence, item-wise unit prices in contracts and their variation over unit rate considered in FR estimates are beyond the control of the Petitioner. The Petitioner further submitted that the cost estimate of the transmission project is on the basis of the March, 2019 price level.

23. We have considered the Petitioner's submissions. The estimated completion of the transmission asset is lower than the FR cost by ₹9.73 lakh. Accordingly, the capital cost claimed by the Petitioner is approved.

#### **Time Over-run**

24. The Petitioner has submitted that as per IA dated 29.7.2019, the transmission project was scheduled to be executed within 15 months from the date of IA. Hence, the scheduled date of commercial operation (SCOD) was 28.10.2020, against which the transmission asset was executed on 19.5.2021, with a time over-run of 202 days.

25. The Petitioner submitted that the time over-run in the execution of the transmission asset was due to the Covid-19 pandemic, which had completely stalled the work for around 151 days and delay in inspection of the element by CEA for around 51 days. The Petitioner has submitted the following reasons for the delay.

#### **Delay due to Worldwide Covid-19 Pandemic**

26. The construction work was in full swing, and unfortunately, in the month of March, 2020, the Covid-19 pandemic was declared. It was difficult to continue the work as most of the labourers went to their hometowns, and construction work was stopped. The Petitioner has



submitted that recognizing the sensitivity of the project and understanding the gravity of the outbreak of the Covid-19 pandemic, the Ministry of Power (MoP) granted an extension of 5 months in SCOD of the projects scheduled to be put under the commercial operation after March 2020 vide its letter dated 27.7.2020. Accordingly, the SCOD of the transmission project was extended by 5 months to 28.3.2021.

**Delay in inspection of the element by CEA**

27. The Petitioner has submitted that the delay beyond 29.3.2021 was mainly on account of a delay in inspection of the element by CEA as all major works were completed in March 2021, and an online request for inspection and clearance from CEA was submitted on 24.3.2021. However, as the second wave of Covid-19 had set in, the CEA Inspector could not visit the site and finally, the site was inspected through video conferencing in May 2021, and the bays were charged on a 'no load basis' on 17.5.2021.

28. The Petitioner has prayed the Commission to condone the time over-run in the execution of the transmission asset as the same was due to uncontrollable factors and is covered by Regulation 22(2) of the 2019 Tariff Regulations.

29. We have considered the submissions of the Petitioner and have also gone through the record. The transmission asset was scheduled to be put into commercial operation within 15 months from the date of approval of the IA dated 29.7.2019, against which the transmission asset has been put under deemed CoD on 19.5.2021. . There is a delay of 202 days in the commercial operation of the transmission asset. The Petitioner has submitted that the delay of 151 days, i.e. from the time period from 28.10.2020 to 28.3.2021, is due to the Covid-19 pandemic and 51 days' delay from 29.3.2021 to 11.5.2021 is owing to the delay in the inspection of the element by the CEA.



30. MoP vide its letter dated 27.7.2020, has extended the SCOD in respect of the inter-State transmission project by 5 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 inter State transmission projects*

*Sir,*

*I am directed to state that transmission utilities have pointed out that construction activities at various transmission project sites have been severely affected by the nationwide lockdown measures announced since 25<sup>th</sup> 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. 25<sup>th</sup> 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 25<sup>th</sup> 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.”*

31. In the aforesaid letter MoP, taking into consideration that the construction activities of the various transmission projects were severely affected by the nationwide lockdown from 25.3.2020 due to the outbreak of Covid-19, decided that all inter-State transmission projects which were under construction as on the date of lockdown, i.e. on 25.3.2020, shall get an extension of 5 months in respect of SCOD provided the SCOD of these projects was post 25.3.2020. In the present case, the transmission project of the Petitioner was under construction on the date of lockdown, i.e. on 25.3.2020, and SCOD of the transmission project was 28.10.2020, i.e. post 25.3.2020 and, therefore, the dispensation provided by the MoP vide its letter dated 27.7.2020 is applicable to the present case. Accordingly, the SCOD of the transmission project is extended by 5 months (151 days), and the revised SCOD is considered



as 28.3.2021. Accordingly, the time over-run of 151 days from the actual SCOD on 28.10.2020 to 28.3.2021 is condoned.

32. There is a further time over-run of 51 days beyond 28.3.2021 in declaring the commercial operation of the transmission asset, and the Petitioner has attributed the same to the delay in CEA inspection. The Petitioner has submitted that the period from 29.3.2021 to 19.5.2021 (51 days) was due to a delay in the inspection of the element by the CEA. We have gone through the submissions of the Petitioner and documentary evidence in support of the same. The Petitioner made an online application on 24.3.2021 and, vide letter its dated 11.5.2021, requested CEA for urgent charging. The CEA, vide its letter dated 12.5.2021, granted a provisional energization certificate and also expressed difficulty in physical inspection due to the Covid-19 pandemic. Thereafter, the Petitioner charged the two 220 kV bays on a 'no-load basis' on 17.5.2021 and claimed the COD of the transmission asset as 19.5.2021. As the Regional Inspectorial Organization (North) expressed difficulty in physical inspection due to the Covid-19 pandemic and granted provisional certificate on 12.5.2021, we are of the view that the period from 24.3.2021 (date of submission of application for CEA clearance) to 12.5.2021 (grant of provisional energiaztion certificate by CEA) is beyond the control of the Petitioner. Therefore, we condone the time over-run of 51 days due to delay in inspection of the element by CEA. Accordingly, the total time over-run of 202 days in the case of the transmission asset, is condoned.

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

33. The Petitioner has claimed IDC in respect of the transmission asset and has submitted the statement of IDC claim, discharge of IDC liability as on the date of commercial operation and thereafter. The same are as follows:





(₹ in lakh)

IDC as per Auditor's Certificate	IDC Discharged up to COD	Un-discharged IDC up to COD
3.70	2.75	0.95

34. The allowable IDC in respect of the transmission asset has been worked out considering the information submitted by the Petitioner. The loan details submitted in Form-9C and the date of drawl submitted in IDC statements have been considered for the purpose of calculation of IDC for the transmission asset. Accordingly, the IDC allowed in respect of the transmission asset is as follows:

(₹ in lakh)

IDC as per Auditor's Certificate	IDC allowed	IDC disallowed as on COD due to computational difference	Undischarged portion of IDC as on COD*	IDC allowed up to COD on a cash basis
3.70	3.69	0.01	0.95	2.74

\* The un-discharged IDC as on COD of the transmission asset has been adjusted from capital cost as on COD and is considered as ACE in the year in which it is discharged.

35. The Petitioner has submitted that the entire amount of IEDC covered under the instant petition has been discharged up to COD. The details of the same are as follows:

(₹ in lakh)

IEDC claimed as per Auditor's Certificate	IEDC considered by the Petitioner as on COD	IEDC discharged up to COD
90.54	90.54	90.54

36. The IEDC details considered in respect of the transmission asset for the purpose of computation of tariff are as follows:

(₹ in lakh)

IEDC claimed as per Auditor's Certificate	IEDC allowed as on COD
90.54	90.54

As the entire time over-run has been condoned, IEDC claimed by the Petitioner is allowed.



## Initial Spares

37. The Petitioner has calculated Initial Spares considering the sub-station as a brown field category and as per the cost certified in the Auditor's Certificate. Initial Spares claimed by the Petitioner are as follows:

(₹ in lakh)					
Asset Type	Plant and Machinery cost excluding IDC, IEDC, land cost and cost of civil works for the purpose of initial spares (A)	Initial Spares claimed (B)	Ceiling Limit (in %) (C)	Initial Spares worked out D= (A-B)*C/(100-C)	Excess Initial Spares (B-D)
Sub-station (Brown Field)	700.02	56.65	6	41.07	15.58

38. 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 norms:

*“(d) Transmission System*

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

39. The Petitioner has furnished the break-up of year-wise Initial Spares discharged for the transmission asset, and the same are as follows:

(₹ in lakh)		
Sl. No.	Particulars	Sub-station
1	Expenditure up to COD	44.42
2	Expenditure during 2021-22	12.23
<b>Total</b>		<b>56.65</b>



40. 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 also submitted that Initial Spares procured are the essential spares for smooth running of the grid and may be allowed in full under Regulation 76 of the 2019 Tariff Regulations, "Power to Relax".

41. We have considered the submissions of the Petitioner. In the absence of any compelling reason for us to deviate from the norms, we allow the Initial Spares for the transmission asset as per Regulation 23(d) of the 2019 Tariff Regulations. Accordingly, the excess Initial Spares claimed by the Petitioner is disallowed.

42. The allowable Initial Spares in respect of the transmission asset are as follows:

(₹ in lakh)						
Asset Type	Plant and Machinery cost excluding IDC, IEDC, land cost and cost of civil works for the purpose of initial spares (A)	Initial Spares Claimed (B)	Ceiling (in %) (C)	Initial Spares worked out $D = (A - B) * C / (100 - C)$	Excess Initial Spares (B-D)	Initial Spares allowed
Sub-station (Brown Field)	700.02	56.65	6	41.07	15.58	41.07

### **Capital Cost Allowed as on COD**

43. Accordingly, the capital cost allowed in respect of the transmission asset as on COD is ₹459.00 lakh as submitted by the Petitioner as per the Auditor's certificate, and the same is as follows:

(₹ in lakh)				
Capital cost claimed till COD	Less: Disallowed IDC due to computational difference	Less: Undischarged IDC	Less: Excess Initial Spares	Capital Cost as on COD
463.30	0.01	0.95	3.35	458.99



## **Additional Capitalisation**

44. The Petitioner has submitted that the admissibility of ACE incurred after COD is to be dealt with in accordance with the provisions of Regulation 24 of the 2019 Tariff Regulations.

45. 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.”*

46. We have considered the submissions of the Petitioner. ACE claimed by the Petitioner is towards undischarged liabilities recognized to be payable at a future date and balance work deferred for execution and accordingly allowed under Regulation 24(1)(a) of the 2019 Tariff Regulations. .

47. We have already disallowed the excess Initial Spares of ₹12.23 lakh, which has been discharged in 2021-22. The summary of the ACE allowed in respect of the transmission asset as follows:

(₹ in lakh)

Particulars	ACE allowed		
	2021-22	2022-23	2023-24
<b>ACE (Claimed)</b>	200.66	130.31	0.00
<b>Less: Excess Initial Spares</b>	12.23	0.00	0.00
<b>Add: Discharged IDC</b>	0.95	0.00	0.00
<b>ACE (allowed)</b>	<b>189.38</b>	<b>130.31</b>	<b>0.00</b>

48. The capital cost for the transmission asset allowed as on 31.3.2024 is as follows:

(₹ in lakh)

Particulars	As on COD	2021-22	2022-23	2023-24	Total
<b>ACE</b>	458.99	189.38	130.31	0.00	778.68

### **Debt-Equity Ratio**

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

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

*Provided that:*

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



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

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

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

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

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

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

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

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

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

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

50. The Petitioner has claimed the debt-equity ratio of 70:30 in respect of the transmission asset, and the same has been considered by the Commission in accordance with Regulation 18(1) of the 2019 Tariff Regulations, which is as follows:

<b>Funding</b>	<b>Capital cost as on 1.4.2019 (₹ in lakh)</b>	<b>(in %)</b>	<b>Capital cost as on 31.3.2024 (₹ in lakh)</b>	<b>(in %)</b>
Debt	321.29	70.00	545.08	70.00
Equity	137.70	30.00	233.60	30.00
<b>Total</b>	<b>458.99</b>	<b>100.00</b>	<b>778.68</b>	<b>100.00</b>



## **Depreciation**

51. 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.”

52. The Commission has considered the submissions of the Petitioner. 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 after 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 asset has been considered as 100% depreciable. Depreciation allowed in respect of the transmission asset for the 2019-24 tariff period is as follows:

(₹ in lakh)

	Particulars	2021-22 (pro-rata 317 days)	2022-23	2023-24
A	Opening Gross Block	458.99	648.37	778.69
B	Addition during the year 2019-24 due to projected ACE	189.38	130.31	0.00
C	Closing Gross Block (A+B)	648.37	778.68	778.68
D	Average Gross Block (A+C)/2	553.68	713.53	778.68
E	Average Gross Block (90% depreciable assets)	492.99	647.59	707.57
F	Average Gross Block (100% depreciable assets)	60.69	65.93	71.11





	Particulars	2021-22 (pro-rata 317 days)	2022-23	2023-24
G	Depreciable value (excluding IT equipment and software) (E*90%)	443.69	582.83	636.81
H	Depreciable value of IT equipment and software (F*100%)	60.69	65.93	71.11
I	Total Depreciable Value (G+H)	504.38	648.77	707.92
J	Weighted average rate of Depreciation (WAROD) (in %)	6.35	6.18	6.17
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
<b>M</b>	<b>Depreciation during the year (D*J)</b>	<b>30.51</b>	<b>44.08</b>	<b>48.03</b>
N	Cumulative Depreciation at the end of the year	30.51	74.60	122.62
O	Remaining Aggregate Depreciable Value at the end of the year	473.87	574.17	585.30

### **Interest on Loan (IoL)**

53. 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”.

54. 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 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. IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the transmission asset is as follows:

(₹ in lakh)

	Particulars	2021-22 (pro-rata 317 days)	2022-23	2023-24
A	Gross Normative Loan	321.29	453.86	545.08
B	Cumulative Repayments up to Previous Year	0.00	30.51	74.60
C	Net Loan-Opening (A-B)	321.29	423.35	470.48
D	Addition due to ACE	132.57	91.22	0.00
E	Repayment during the year	30.51	44.08	48.03
F	Net Loan-Closing (C+D-E)	423.35	470.48	422.45
G	Average Loan (C+F)/2	372.32	446.91	446.47
H	Weighted Average Rate of Interest on Loan (in %)	5.97	5.98	5.98
I	<b>Interest on Loan (G*H)</b>	<b>19.30</b>	<b>26.73</b>	<b>26.70</b>

### **Return on Equity (RoE)**

55. 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.”

56. The Petitioner has submitted that the MAT rate applies to it. The MAT rate applicable has been considered for the purpose of RoE, which shall be trued up with the actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations.

57. We have considered the submissions of the Petitioner. The RoE is allowed as provided under Regulation 30 and Regulation 31 of the 2019 Tariff Regulations, and it is as follows:

		(₹ in lakh)		
	Particulars	2021-22 (pro-rata 317 days)	2022-23	2023-24
A	Opening Equity	137.70	194.51	233.60
B	Addition due to ACE	56.81	39.09	0.00
C	Closing Equity (A+B)	194.51	233.60	233.60
D	Average Equity (A+C)/2	166.10	214.06	233.60
E	Return on Equity (Base Rate) (in %)	15.50	15.50	15.50
F	Tax Rate applicable (in %)	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax) (in %)	18.782	18.782	18.782
H	<b>Return on Equity (Pre-tax) (D*G)</b>	<b>27.09</b>	<b>40.20</b>	<b>43.87</b>

### **Operation & Maintenance Expenses (O&M Expenses)**

58. O&M Expenses claimed by the Petitioner for the 2014-19 tariff period are as follows:

		(₹ in lakh)		
	Particulars	2021-22 (pro-rata 317 days)	2022-23	2023-24
	O&M Expenses	41.90	49.92	51.68

59. 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
<b>Norms for sub-station Bays (₹ Lakh per bay)</b>					
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
<b>Norms for Transformers (₹ Lakh per MVA)</b>					
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
<b>Norms for AC and HVDC lines (₹ Lakh per km)</b>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.26	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
<b>Norms for HVDC stations</b>					
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  $\pm 500$  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  $\pm 500$  kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of  $\pm 800$  kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for  $\pm 800$  kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of  $\pm 800$  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  $\pm 800$  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.

”

60. We have considered the submissions of the Petitioner. O&M Expenses are allowed as per Regulation 35(3)(a) of the 2019 Tariff Regulations, and it is as follows:

Particulars	(₹ in lakh)		
	2021-22 (pro-rata 317 days)	2022-23	2023-24
2 number of 220 kV Bays at Samba Sub-station	41.90	49.92	51.68

### **Interest on Working Capital (IWC)**

61. 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.”

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

63. 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 with respect to the transmission asset are as follows:

Particulars	(₹ in lakh)		
	2021-22 (pro-rata 317 days)	2022-23	2023-24
Working capital for O&M Expenses (O&M Expenses for one month)	3.49	4.16	4.31
Working capital for Maintenance Spares (15% of O&M Expenses)	6.28	7.49	7.75
Working Capital for Receivables (Equivalent to 45 days of Annual Fixed Cost /Annual Transmission Charges)	14.97	20.25	21.37
Total Working Capital	24.74	31.90	33.43
Rate of Interest for Working Capital (in %)	10.50	10.50	10.50
<b>Interest on Working Capital</b>	<b>2.60</b>	<b>3.35</b>	<b>3.51</b>



### **Annual Fixed Charges for 2019-24 Tariff Period**

64. The transmission charges allowed in respect of the transmission asset after COD for the 2019-24 tariff period are as follows:

Particulars	(₹ in lakh)		
	2021-22 (pro-rata 317 days)	2022-23	2023-24
Depreciation	30.51	44.08	48.03
Interest on Loan	19.30	26.73	26.70
Return on Equity	27.09	40.20	43.87
O&M Expenses	41.90	49.92	51.68
Interest on Working Capital	2.60	3.35	3.51
<b>Total</b>	<b>121.40</b>	<b>164.28</b>	<b>173.79</b>

### **Filing Fee and Publication Expenses**

65. 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.

### **License Fee and RLDC Fees and Charges**

66. 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**

67. 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.

68. 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**

69. The Petitioner has submitted that security expenses in respect of the transmission asset are not claimed in the instant petition, and it would file a separate petition for claiming the overall security expenses and consequential IWC.

70. 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.

### **Sharing of Transmission Charges**

71. We have already approved the COD of the transmission asset as 19.5.2021 under Regulation 5(2) of the 2019 Tariff Regulations due to the non-readiness of the associated transmission line under the scope of JKPTCL on 19.5.2021. JKPTCL has submitted in its reply that the work of associated two transmission lines under the scope of JKPTCL was also tendered/ awarded by the Petitioner. We are of the view that any delay in execution of the associated transmission lines under the scope of JKPTCL should be settled as per the terms



of the contract/ agreement between the JKPTCL (or the Petitioner on behalf of JKPTCL) and the contractors. As the transmission assets could not be put into commercial operation due to the delay in execution of the associated two transmission lines under the scope of JKPTCL, the transmission charges from the deemed DOCO of the transmission asset, i.e. from 19.5.2021 till the COD of the associated transmission line of JKPTCL should be borne by JKPTCL. It is noticed that the associated transmission line under the control of JKPTCL was charged on 26.7.2021. Therefore, the transmission charges from 19.5.2021 to 25.7.2021 shall be borne by JKPTCL and from 26.7.2021, the transmission charges approved for the transmission asset shall be included in common pool and shall be governed in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

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

Particulars	(₹ in lakh)		
	2021-22	2022-23	2023-24
AFC	121.40	164.28	173.79

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

74. This order disposes of Petition No. 32/TT/2023 in terms of the above findings and discussions.

sd/-  
**(Arun Goyal)**  
Member

sd/-  
**(Jishnu Barua)**  
Chairperson



**Annexure**

(₹ in lakh)

Capital Expenditure	Admitted Capital Cost as on COD	Projected ACE			Admitted Capital Cost as on 31.3.2024	Depreciation Rate (%)	Annual Depreciation		
		2021-22	2022-23	2023-24			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	398.36	189.25	119.96	0.00	707.58	5.28	26.03	34.19	37.36
PLCC	0.00	0.00	0.00	0.00	0.00	6.33	0.00	0.00	0.00
IT Equipment	60.63	0.13	10.35	0.00	71.11	15.00	9.10	9.89	10.67
<b>Total</b>	<b>458.99</b>	<b>189.38</b>	<b>130.31</b>	<b>0.00</b>	<b>778.68</b>		<b>35.13</b>	<b>44.08</b>	<b>48.03</b>
						<b>Average Gross Block</b>	<b>553.68</b>	<b>713.53</b>	<b>778.68</b>
						<b>WAROD (%)</b>	<b>6.35</b>	<b>6.18</b>	<b>6.17</b>

